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**DEVELOPMENT STRATEGY
FOR
SERVICE POPULATION AROUND
HAZIRA INDUSTRIAL COMPLEX**



OPERATIONS RESEARCH GROUP, BARODA

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SUMMARY

The Hazira industrial complex situated in the southern tip of Gujarat is fast assuming the status of the major industrial centre of national importance. Some of the advantages perceived in this region are the newly found gas resources and the water frontage available on either side. About a dozen large and medium scale industrial units have announced their plans to establish industries which will mainly utilize the gas resources available here. Out of these units only two large scale units like KRIBHCO and Larsen & Toubro have started their production.

On the basis of past experience, it is observed that large scale industrial growth creates demand for unorganised sector services. However, appropriate planning and development is not undertaken for this sector. In this context, the present study to develop a strategy for service population around Hazira Industrial Study has been carried out. Major findings are given below:—

- (a) Projection of labour force and population have been made for two scenarios. S1 projections are without a full-fledged petro-chemical complex in the region whereas S2 projections are with a full-fledged petro-chemical complex. The total projected population in region for S1 and S2 is 1.2. and 4.1 lacs respectively.
- (b) Target group is defined as population dependent on service population. In case of S2, 1.95 lac persons or about 49 thousand households will be the target group. At present, almost no programme has been planned for these households.
- (c) Cost of development for the target population is estimated to be Rs. 71 crores. This cost has been estimated for providing basic shelter, developed plot, water supply and sanitation facilities.
- (d) Estimated cost of development for the service population is less than 1% of total investment in the industrial sector. However, it is about Rs. 1.87 lacs per hectare of land which is almost equal to present cost of land and site development.

In this perspective, it is suggested that all the large industries should provide 10 per cent of their land area for the service population. This is also act as a disincentive to acquire more land than needed. These lands should be pooled together at three or four appropriate locations to form 'Service Population Nodes.' Wherever the industries are not in position to provide land area, they should bear cost of acquiring land for these nodes.

The nodes should be developed by either GIDC or GHB. They should provide different shelter option to the target group. Off-site infrastructure to these sites should be provided by the state government. On-plot development cost should be borne by the households. HUDCO and other financing agencies may be approached for financing these schemes.

CHAPTER I

INTRODUCTION

1.1 Background

Hazira industrial complex is situated on the southern tip of Gujarat State. In the next ten years, the magnitude of investment is expected to be as high as Rs. 8000 crores in various types of industries. Thus Hazira is fast assuming the status of the major industrial centre of national importance. With the establishment of industrial activity of this magnitude it is estimated that ancillarization and population growth of the corresponding figure might take place.

To cope with industrial growth and development activity the Hazira Development Authority (HADA) has already been constituted under the provision of Gujarat* Town planning and Urban Development Act 1976. The HADA authority has been constituted to evolve a policy framework for a systematic intelligent control of development activity in this region.

Despite the fact that similar authorities have been created in the recent past to make 'conscious efforts to tackle urbanisation in a rational manner' dualistic pattern of growth on contrasting path did emerge. To cite concrete examples, in the post-independence period, certain areas which were completely rural have witnessed large scale public sector investment and in turn given rise to medium-sized cities such as Chandigarh, Durgapur, Neyveli, Bhilai and Bokaro.**

These cities to a greater extent witnessed planned residential townships for workers of the organised industries. On the other hand large unplanned congested settlements emerged on private lands around market centres. In addition, shortage of power and water supply surfaced despite the fact that hinterland of the cities remained unaffected of the tempo of development. Environmental degradation also continued to accompany this path of growth.

1.2 Objectives

This type of dualistic growth pattern raises serious doubts whether our urbanisation policy and 'conscious efforts' are adequate. Hence the present study aims to analyse the existing socio-economic situation, projection of employment in formal and informal sector and population growth. An attempt will be made to analyse existing industrial activity and the concomitant growth in terms of housing, power and water supply, drainage

and other needs for the projected population growth with the following objectives to evolve:

- (a) a framework of preventive and curative policies,
- (b) planning guidelines for the development authorities,
- (c) arrangement for resource mobilisation through a concept of shared responsibility and
- (d) an organisational set up to ensure proper implementation, monitoring and evaluation.

1.3 Methodology

The present study has attempted to project population for the next fifteen years. Flow diagram for the methodology is presented in Figure 1. The term service-population here refers to the population engaged in the unorganised sector.

The population growth of this group will mainly depend on the magnitude of industrial growth and the infrastructural needs of the region. Hence an attempt has been made to analyse industrial situation by sending questionnaires and conducting interviews of the concerned officials of various industries and the government.

This study has presented two scenarios for estimating the size of population and the housing and other amenities required by them. One short-term scenario ranging upto five years on the basis of existing industrial set up. Another scenario is drawn for the next fifteen years on the basis of proposed plans of industrialisation. A special feature of this study is a section on existing socio-economic situation. This section has been included to plan social facilities in advance.

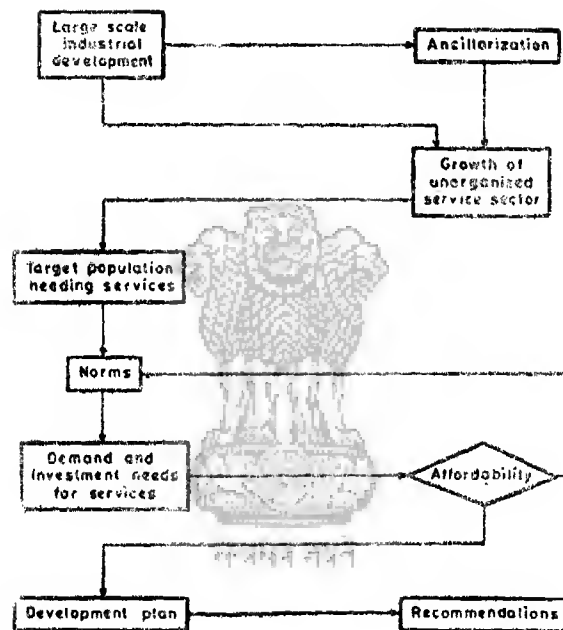
1.4 Present Report

This is draft final report of the study. An interim report was submitted to NCU. The interim report was discussed with the concerned member of NCU and others. Based on various suggestions and additional information available during this period the present report has been prepared. It is felt that it will provide a basis for further discussion on this important but neglected aspect of industrial and urban planning in the country.

*Vide notification No. GHU/12/UDA/1181/5109-V dated 17-10-1985.

**No. Vijay Jagannathan, 'Planning in New Cities : The Durgapur Experience,' *Economic and Political Weekly* (Vol. XXII, No. 13, March 28, 1987), pp. 553-558.

Fig.1: FLOW DIAGRAM FOR METHODOLOGY



CHAPTER II

PROPOSED INDUSTRIAL SET-UP AND MANPOWER STRUCTURE

2.1. General

Hazira has already been identified as a thrust area for major industrial development by the Government of Gujarat. This region constitutes about 86 kms. area of Chorasi taluka which is 16 kms. away from Surat city (refer Figure 2). The locational advantages for industrializing this area are said to be as follows. The newly found gas resources from Bombay High and the HBJ (Hajira, Billaspur, Jagdishpur) pipeline which passes through this region. Secondly, water frontage is available on either side as this region is bound by Arabian sea and river Tapi on the other side. This facilitates transportation needs of the industries. Thirdly this region is known to be 'barren' land.

The existing industrial set up reveals that this location has already attracted about a dozen large scale units in private, public and joint sectors. Fifty per cent of the expected investment has already been announced and some of the units are at take-off stage. Most of these units use natural gas as their basic resource. However, these units are of diverse nature in terms of their products with little interaction between one another.

The nature and magnitude of these units will provide an idea about the ancillarization that might take place in the region and the necessary infrastructural development for the same (Table 2.1). The following units have already started their production and might expand in future. The second category provides an idea about the units whose construction at the plant has been initiated but production is yet to begin. In the third category the projects are conceived and the final sanction from

the government is awaited. It appears from the interviews conducted, that the first categories of units will operate in full-fledged condition in the next five years. The third category of units might take fifteen years from now to develop the full-fledged strength. A profile manpower structure which will be required by the industrial activities is also presented in this chapter.

2.2. Projects in Operation

(i) KRIBHCO

Krishak Bharati Co-operative (KRIBHCO) is fertilizer plant in joint sector. This plant produces fertilizer grade urea (4×1100 MT/day) and anhydrous ammonia (2×1350 MT/day) as an intermediate product. This plant is expected to generate direct employment for 2000 persons with investment of Rs. 1000 crores. The KRIBHCO society has acquired about 1800 acres of land. Out of the total land, 400 acres has been utilized for the land site and for constructing a well planned township 90 acres have been utilized. The investment required for land and site development is only 2.28 per cent of total cost. The township at present meets almost 80 per cent of the housing needs.

(ii) GAS AUTHORITY OF INDIA LTD. (GAIL)

GAIL is establishing gas compressor plant necessary for HBJ pipeline with an investment of Rs. 150 crores and will generate employment for 200 persons. 39 hectares of land has been earmarked for the same.

TABLE 2.1 : Salient Features of Industries in Hazira Complex

Type	Total land requirement (ha.)	Total expected employment	Total expected investment (crores)
1. <i>Projects in Operation</i>			
(a) KRIBHCO	560	4,000	1,000*
(b) Gas Authority of India	38	200	150
(c) Larsen & Toubro	800	1,000	200
Sub-total	1,398	5,200	1,350
2. <i>Projects initiated</i>			
(a) Indian Oil Corporation	48	140	260
(b) NTPC	230	400	600
(c) ONGC	520	5,200	715
(d) Assand Jain	N.A.	N.A.	5
(e) L. K. Nanda	N.A.	N.A.	5
(f) Petro-polymer	16	150	150
(g) Reliance	245	500	800
Sub-total	1,059	3,690	2,420
3. <i>Projects in Pipeline</i>			
(a) Gujarat State Petro-chemical Complex	560	10,000	2,050
(b) Essars Steel	N.A.	500	305
(c) Ancillaries	750	40,000	2,000
Sub-total	1,310	50,500	4,355
TOTAL	3,767	59,390	8,125

*Excluding future investment.

(iii) **LARSEN & TOUBRO**

Larsen and Toubro is a private sector heavy engineering plant. This unit has acquired 200 acres of land. Here all land is used for industrial plant only and housing has not been planned as yet. This project has already generated employment for about 650 persons and expected to generate employment for 1000 persons. This will produce plant, equipment and modules for Nuclear Power projects, heavy water projects, Nuclear and space research projects and allied projects with capacity of 10,000 tonnes per annum.

2.3 Projects Initiated

The status of the following 9 projects is as follows:

(i) **INDIAN OIL CORPORATION (IOC)**

The IOC has invested Rs. 260 crores for the LPG bottling plant, this will generate employment for 140 persons. An area of 40 hectares has been acquired.

(ii) **NATIONAL THERMAL POWER PROJECT (NTPC)**

The NTPC has already acquired 230 hectares to set up a 600 MW gas based power project at Kavas village. This will be country's first gas-based power project. This is expected to generate employment for 400 persons with the investment of Rs. 600 crores. Construction work for housing scheme has already begun on 23 hectares land. If the proposed 260 hectares are required, the township will cover about 9 per cent of the total land.

It seems that this power project might get delayed for some time due to the fact that the final agreement has not been signed with a collaborating firm which was going to set the plant.

(iii) **ONGC**

The ONGC has acquired 350 hectares and another 170 hectares are under the acquisition procedure. This project has invested Rs. 600 crores and have a future plan of another Rs. 115 crores. 2000 persons are already employed and 500 more will be absorbed if further expansion takes place. Housing scheme has not been finalised and the employees are commuting between Surat and the plant site at Bhatpor.

(iv) **ANAND JAIN**

Another unit which will produce HDPE with 1,600 MT per annum is Anand Jain Ltd. This will invest Rs. 5 crores and generate employment for about 200 persons.

(v) **L.K. NANDA**

L.K. Nanda's unit has invested about Rs. 5 crores to generate employment for 150 persons. This unit will produce 5 million sq. mtrs. of Figured glass and Wireglass per annum.

(vi) **PETROPOLYOLS**

Petropolyols is an NRI venture. It will manufacture petrochemical items. This unit has acquired 16 hectares of land and invested Rs. 150 crores to generate direct employment for 150 persons.

(vii) **RELIANCE'S PETROCHEMICAL PROJECT**

Reliance Industries Ltd. is establishing a petrochemical complex with an investment of Rs. 800 crores. This project has plans to acquire 245 hectares of land and will generate direct employment for 500 persons. This unit will be manufacturing Poly Vinyl Chloride and HDPE with the capacity of 1,00,000 M.T. and 50,000 M.T. per annum respectively.

The following results emerge if the employment figures for the preceding two categories are combined. It is expected that all the industrial units will be operating with full fledged capacity after likely expansion in the next five years i.e. 1988-93.

The large scale industrial sector will generate employment for 8,000 persons and 4,000 more will be added by the likely ancillarization. Against this figure the unorganised sector will also generate employment for about equal number of person. All these put together will add 24,000 persons.

2.4 Projects in Pipeline

(i) **GSPCL**

Another large scale unit in joint sector will be Gujarat State Petrochemicals Corporation Ltd. (GSPCL). The final sanction for this project is expected very soon. Though detailed information is not available for this proposal, it is estimated that about Rs. 1,200 crores will be invested which will generate direct employment for at least 10,000 persons. The GSPCL is hoping to acquire 560 hectares land to produce ethylene, HDPE and PVC with production capacities of 1,60,000, 1,00,000 and 1,00,000 tonnes per annum respectively. This plant is supposed to generate greater ancillarization since petrochemical products have great number of application.

(ii) **ESSAR'S SPONGE IRON PROJECT**

A sponge iron project being set up by the Essar Steel is expected to invest Rs. 305 crores. This will be the first gas based sponge iron plant in the country and the largest of its kind in the World. This project is expected to be operational by end of 1989 and generate employment for about 500 persons.

(iii) **GUJARAT INDUSTRIAL DEVELOPMENT CORPORATION (GIDC)**

Lastly, the GIDC has decided to develop an industrial estate which will cater to the needs of downstream industries to be established in the range of small and medium scale. This industrial estate is expected to generate employment for about 40,000 persons directly with investment ranging upto Rs. 2,000 crores.

Since it is difficult to expect the small scale units or all the medium size units to construct, their own housing, this industrial estate will generate greater pressure or problems for the residential area of this region

The project in pipeline are expected to operate with ~~existing~~ capacity in the next fifteen years i.e. by 2003 A.D. This would ~~provide~~ a major project like GSPCL which is going to have major impact on ancillarisation process. The downstream converter industries which utilize petrochemical product is also expected to generate relatively high potential of employment*. Different type of petrochemical products such as synthetic fibre, plastic and intermediate products have wide application in the following items.

Adhesives, dyes, pharmaceuticals, pesticides, printing inks, synthetic detergents, lube oils/speciality oils, industrial solvents, solvents for surface coatings, resins for surface coatings, packaging films, moulded goods, monofilaments and fibres, electrical insulation, rubber and rubber goods, automobile tyres, garments, hosiery synthetic fibre intermediates, industrial chemicals, plastic intermediates, plastic processing aids, agri-aids, etc.

It was also found in different parts of the country that there were several small scale units with 5 MT per annum capacity producing different kind of plastic items. However, these units operated without much technical background.

Another major venture will be the GIDC Industrial estate. This will mainly be based on small scale or medium scale units. Thus the small sector is expected to be larger than the large scale sector in the second phase in terms of employment.

2.5 Manpower Structure

Modern technology and the phenomenon of rapid obsolescence have introduced an element of twin problem of surplus manpower coexisting with shortage of definite type of manpower.

It appears from the current pace of investment that in the next fifteen years the total investment may exceed the amount of Rs.8000 crores. Similarly the employment generation is also likely to be around 60,000 in the industrial sector. If the manpower structure is analysed from the available data, the following characteristics are observed:

- (a) Depending on the nature of industry the science and technological (S&T) manpower requirement vary from 15 per cent to 60 per cent of the total manpower employed in different units. However, average requirement in this category could be estimated to be 20 per cent of the total requirement for the whole complex.
- (b) Demand for skilled labour would remain the highest of all categories of manpower. The proportion of this category has varied from 15 per cent to 80 per cent. The average demand for this category could be estimated to be about 70 per cent of the total manpower employed in the whole industrial complex.

- (c) Similarly, demand for the unskilled labour could be worked out to be about 10 per cent of the total. This is obviously the lowest figure in the manpower structure.

As far as the GSPCL is concerned, the employment is found to be generated at various levels such as design and engineering, supply of machinery and fabricating equipments construction and erection of plants etc. It is estimated that 10 technical persons will be required for 100 TPA polymers processed.†

Technical personnel will be required in the following areas:

- (a) Chemical Engineering
- (b) Polymer and hydrocarbon technology
- (c) Plastic, textile technology
- (d) Mechanical, civil, electrical and instrumentation engineering

At present the universities/ITIs turn out only 110 graduates in such type of fields. It is estimated that by 2000 A.D. the country will require at least 320 persons in this field.

Moreover, the advent of microprocessor based DDC instrumentations and control system requires suitable personnel to design, operate and maintain such system. The courses offered require to be suitably moulded.

Another course which require to be introduced is corrosion control and inspection which has developed in to a specialised field.

The courses in textile technology so far stressed aspects specific to processing of cotton. These courses need to be restructured to include synthetic fibre.

Very few polytechnics offer specific courses in plastics polymer technology or textile engineering.

It was also found that skilled operating staff will be required in great numbers (62 per cent of the total). The institution like ITI can introduce such type of courses at the study area.

2.6 Major Observations

Total investment in Hazira industrial complex is estimated to be about Rs. 8000 crores in next five years. It will generate organised sector employment for about 60 thousand persons. Most of this employment will be for skilled labour. These skills, at present, are not available locally. There is need to set-up technical institutions in the area. These institutions should be oriented towards need of the future industrialisation in Hazira area.

At present, GIDC acquires land on behalf of the proposed large-scale industries. Cost of acquiring land and service charges are recovered from the industries. It has been observed that industries are acquiring land much beyond their immediate needs. The cost of land and site development is estimated to be between 2 to 3% of the total cost of industrial development.

Such a huge investment in industrial sector will generate employment in unorganised sector. Almost no planning has been undertaken for this sector. It is a matter of grave concern. This aspect has been further elaborated in the subsequent chapters of the report.

*Report of the Committee for Perspective Planning of Petrochemical Industries (1986-2000 A.D.), Department of Chemicals & Petrochemicals, Ministry of Industries, Government of India, New Delhi, 1986.
†ibid.

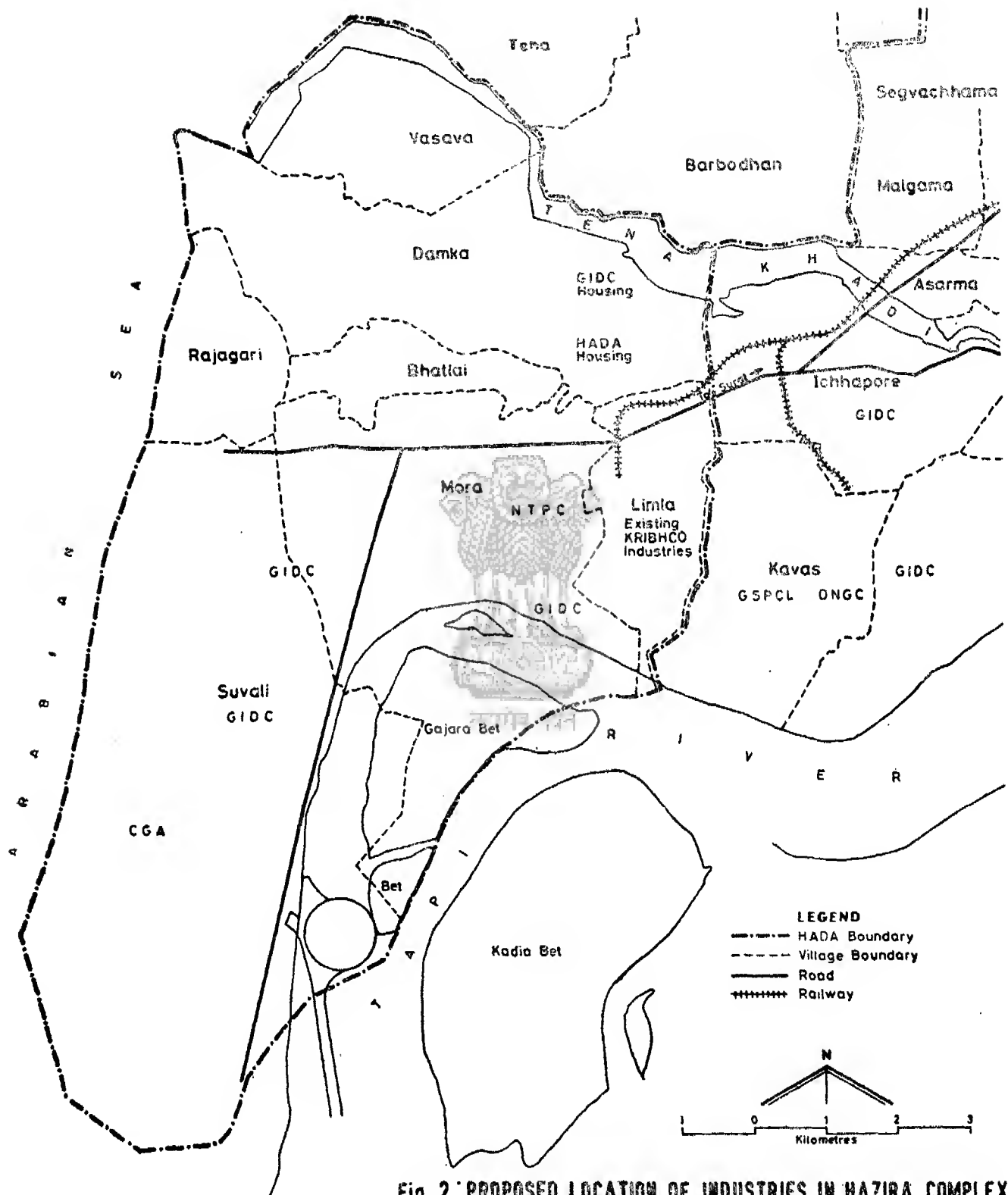


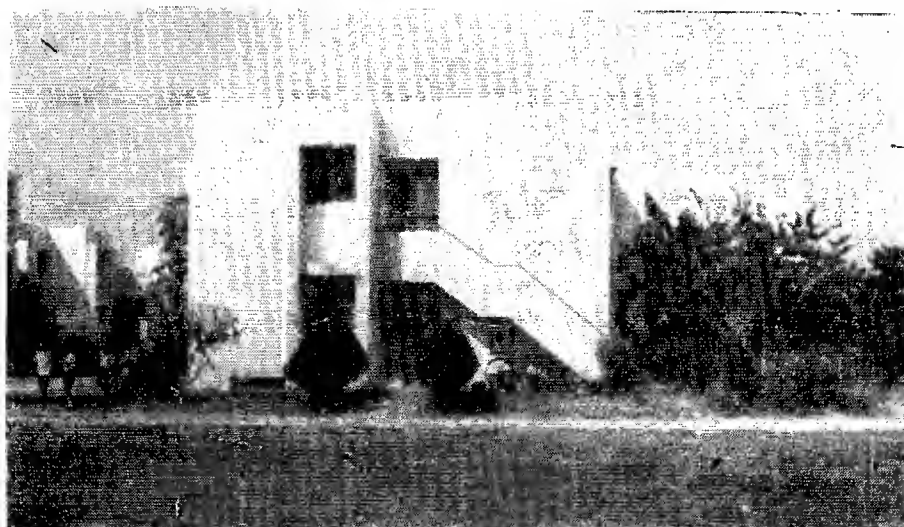
Fig. 2 : PROPOSED LOCATION OF INDUSTRIES IN HAZIRA COMPLEX



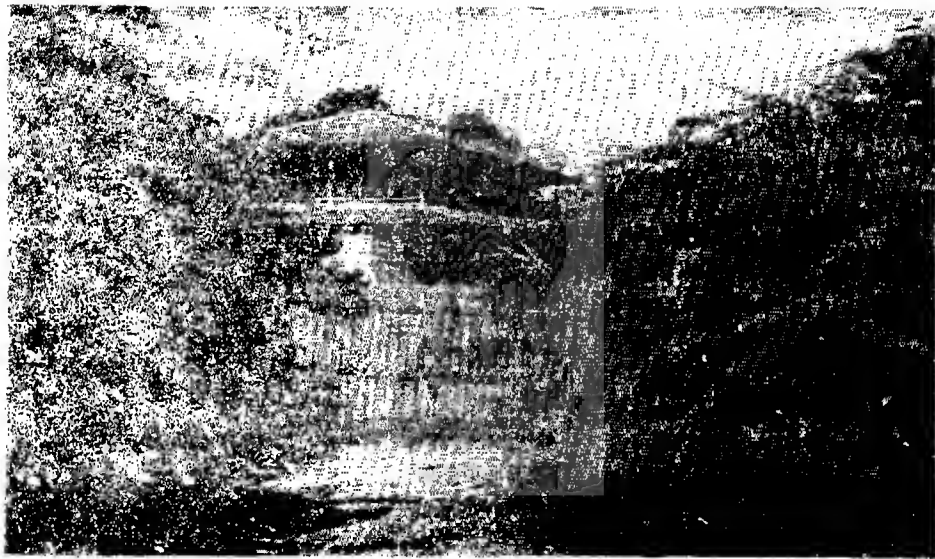
P 4 : TRADITIONAL RURAL HOUSING



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P 5 : KRIBHCO'S HOUSING COMPLEX

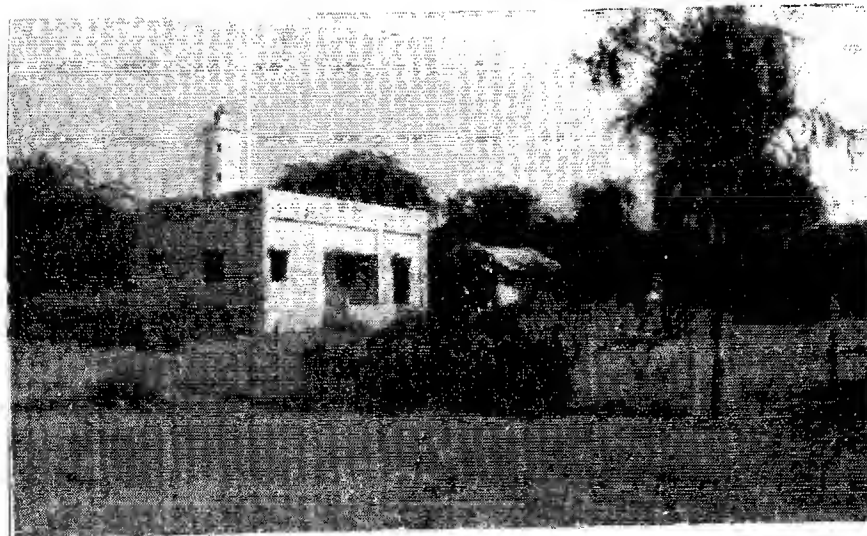


P 2 : TRADITIONAL SANITORIUM

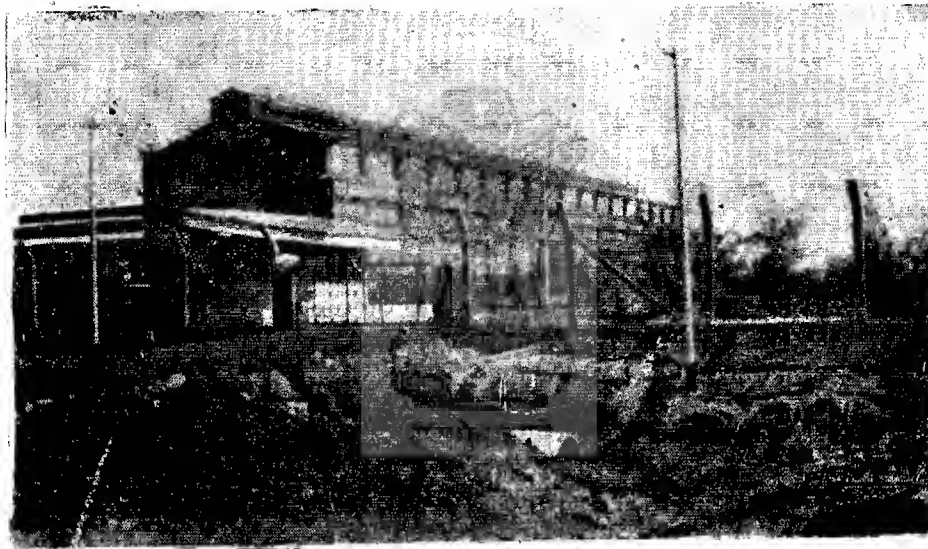


P 6 : NATURAL LANDSCAPE

नमो भगवते वासुदेवाय



P 7 : LIGHT HOUSE AND FOREST RESOURCES



P 8 : L & T INDUSTRIAL UNIT

CHAPTER III

SOCIO-ECONOMIC SITUATION

3.1 Population

This study has identified 11 villages of Hazira region as the impact area of industrialization. Total population according to 1981 census is about 21000 in this area and it has increased to about 28000 in 1986 (Table 3.1). Asarma is a barren village. Population in other villages is varied between 800 to 3500 (1981). Population of Ichhapor has nearly doubled in last five years.

3.2 Land Use and Holding Pattern

Total area covered is about 11,000 hectares out of which about fifty per cent is cultivable area (Table 3.2). About 26% of the area is not cultivable. Proportion of

waste land is high in Mora Bhatpor and Kavas villages. Non-revenue land accounts for 17% of total land. Its contribution is high in Hazira and Damaka villages.

Agriculturally, there does not exist a single village which could be considered barren. The net sown area in this very village is as high as about 82 per cent of the total area. Out of the total population about 5000 persons are employed in agriculture. This region is dominated by landless farmers (36%) and marginal farmers (19%) which constitute about 55 per cent of the total persons engaged in agriculture (Table 3.3). Small farmers (18%), medium farmers and large farmers (27%) constitute the rest of the persons employed in agriculture.

TABLE 3.1 : Population Distribution in Villages of Hazira Region

Sr. No.	Name of Village	Total Population	
		1981	1986
1	Asarma	—	—
2	Bhatlai	867	1,000
3	Bhatpor	2,072	2,500
4	Damaka	3,315	3,331
5	Hazira	3,358	4,000
6	Ichhapor	3,487	7,000
7	Kavas-Limala	2,417	3,500
8	Mora	1,083	1,200
9	Sunvali	1,939	2,300
10	Rajagari	823	900
11	Vansava	1,692	2,000
TOTAL		21,053	27,731

Sources : Census for 1981 and Village Level ORG Survey for 1986.

TABLE 3.2 : Land Use Pattern in Villages of Hazira Region (Ha)

Name of Village	Total	Cultivable	Cultivable Waste & Barren	Forest	Non-Revenue	Public Purpose	Other (including non-residents)
Asarma	163	135	28	—	—	—	—
Bhatlai	257	131	35	—	66	18	7
Bhatpor	824	469	295	—	—	7	53
Damaka	1,376	697	12	—	385	228	54
Hazira	2,012	682	5	18	1,276	29	2
Ichhapor	2,254	1,899	119	—	—	190	46
Kavas-Limala	822	359	253	—	147	63	—
Mora	2,252	408	1,815	14	—	12	3
Sunvali	414	390	4	—	—	20	—
Rajagari	350	189	156	—	—	—	5
Vansava	497	206	278	—	—	12	1
TOTAL	11,221	5,565	3,000	32	1,874	579	171
	(100) †	(50)	(26)	(—)	(17)	(5)	(2)

† Figures in parenthesis give percentage to total.

TABLE 3.3 : *Land Holding Pattern in Hazira Region*

Sr. No.	Name of Village	Land Holding Pattern (acres)			
		Landless	Marginal Farmers (upto 2.5)	Small Farmers (2.5 to 5)	Medium and Large Farmers (Above 5)
1	Asarma	—	—	—	—
2	Bhatlai	80	27	43	32
3	Bhatpor	115	75	200	168
4	Damaka	150	207	231	153
5	Hazira	225	115	225	160
6	Ichhapor	413	62	46	407
7	Kavas-Limala	159	180	9	165
8	Mora	180	52	29	189
9	Sunvali	395	120	91	47
10	Rajagari	150	34	41	29
11	Vansava	50	113	70	37
TOTAL		1,917 (36)	985 (19)	985 (18)	1,387 (27)

3.3 Cropping Pattern

One of the disturbing aspect of agriculture in Hazira region is decrease in area under cultivation from 5034 ha in 1981-82 to 3628 ha in 1985-86 (Table 3.4). The decrease is significant in villages namely, Damaka, Mora, Kavas and Asarma. This is partly because of rapid industrialisation in the region. This may also be due to extreme draught condition in last two years.

Fodder crops are grown in about 24% of the total cultivated land. It is because these villages are situated close to Surat city. Vegetables and fruits account for 25% of the total area. Other major crops are cereals and pulses.

3.4 Irrigation and Agricultural Mechanization

Most of the land in this region is not irrigated. Only 10% of the total land has irrigation facility. It is mostly through dugwells. Only Damaka village has canal irrigation. Agriculture is mechanized only to certain extent (Annexure Table-I). This is clear from the presence of pumpsets for irrigation in small numbers. Even tractors and threshers are available to small number of farmers.

3.5 Existing Industries

Increasing industrialisation may throw most of the land-less, marginal, small and medium farmers of their profession. This requires training facilities to absorb them in the expanding industry, trade and commerce to avoid any kind of social tension.

TABLE 3.4 : *Cropping Pattern in Hazira Region—Area under different crops (Ha)*

Villages	Total		Cereals		Pulses		Vegetable & Fruits		Cotton		Fodder Crops	
	81-82	85-86	81-82	85-86	81-82	85-86	81-82	85-86	81-82	85-86	81-82	85-86
1. Asarma	502	132	107	47	210	33	—	—	110	8	75	44
2. Bhatlai	118	111	55	41	6	2	11	24	—	—	46	44
3. Bhatpor	349	220	181	54	10	35	89	53	19	1	50	77
4. Damaka*	1,095	702	533	338	70	19	111	276	—	—	381	69
5. Hazira	651	614	243	210	59	2	99	137	—	—	250	265
6. Ichhapor*	576	571	222	381	145	9	114	76	2	1	93	104
7. Kavas	575	383	291	88	17	21	13	4	—	—	254	270
8. Rajagari*	178	153	71	46	4	2	31	45	—	—	72	60
9. Mora	402	126	115	49	1	—	49	27	—	—	237	50
10. Sunvali*	354	380	110	88	1	1	45	114	—	—	198	187
11. Vansava	234	226	2	2	—	7	122	141	—	—	110	76
TOTAL	5,034	3,618	1,930	1,344	523	131	684	897	131	10	1,766	1,246

*Figures available for 1982-83 and not for 1981-82.

ANNEXURE TABLE I : Animal power and mechanization in Hazira Region

Sr. No.	Name of Village	Major animals				Major agricultural implements				
		Bullocks	Cows	Buffaloes	Goats	Tractors	Pumpsets	Thresher	Power Tiller	Bio-gas plants
1	Asarma	—	—	—	—	—	—	—	—	—
2	Bhatlai	80	50	120	150	—	—	—	—	—
3	Bhatpor	50	400	1,000	300	2	—	—	—	—
4	Damaka	180	110	370	3,000	2	45	—	—	1
5	Hazira	256	250	868	2,030	6	12	—	—	3
6	Ichhapor	965	425	1,270	250	10	—	—	—	—
7	Kavas-Limala	105	250	310	150	2	—	—	—	—
8	Mora	120	150	700	150	—	—	2	—	3
9	Sunvali	50	100	500	600	1	10	—	—	—
10	Rajagari	30	70	150	300	—	2	—	—	—
11	Vansava	100	50	500	200	2	70	1	—	—
TOTAL		1,936	1,855	5,788	7,130	25	139	3	—	7

A small portion of population is also engaged in existing industries such as diamond mills, bidi-making, steel-cutting and lathe machines. A small number is also engaged in petty trade in this region (Annexure Table II).

Industrialisation may also amount to displacing the existing population with their houses out of the total 5000 houses about 40 per cent of the houses are pucca house (Annexure Table III). Displacement in the areas of concentrated population might create social problems in the process of industrialisation. In Bhatpor village about 80% of the land has been taken over by the industries. In some of the other villages such as Kavas, Bhatlai, Ichhapor the process of land acquisition is going on.

3.6 Social Facilities

Level of existing social facilities in the region is presented in Table 3.5. Except Post Office and Primary School

most of the facilities are not available in the villages. For 3 of the 11 villages, High school facilities is situated more than 10 kms. away. Nearest technical school is in Surat city (14 to 21 kms.). Public Health Centre is situated at a distance of 10 kms. for two of the villages. Some of villages have telephone facility.

As far as educational status is concerned, out of 2300 persons who received some type of formal education only 10 per cent received technical qualification. (Annexure Table IV). About 80 per cent had taken high school education and the rest 10 per cent received college education.

The infrastructural development for the proposed industrialization will have to take into consideration the proceeding socio-economic conditions of the region.

TABLE No. 3.5 : Availability of Social Facilities

Sr. No.	Name of Village	Post office	Tele- phone	Tele- graph	Pre- primary	Primary	Middle	High School	College	Technical
1	Asarma	—	—	—	—	—	—	—	—	—
2	Bhatlai	Damaka 2 km	Kavas 10 km	Surat 19 km	Within village	Within village	Within village	Ichhapor 9 km	Surat 19 km	Surat 19 km
3	Bhatpor	Within village	Bhatra 2 km	Surat 10 km	Ichhapor 2 km	"	"	Ichhapor 2 km	Surat 10 km	Surat 10 km
4	Damaka	"	Within village	Surat 20 km	Within village	"	"	Within village	Surat 20 km	Surat 20 km
5	Hazira	"	Kavas 14 km	Surat 28 km	"	"	"	"	Surat 28 km	Surat 28 km
6	Ichhapor	"	Within village	Surat 10 km	"	"	"	"	Surat 10 km	Surat 10 km
7	Kavas-Limala	"	"	Surat 14 km	Ichhapor 3 km	"	"	Ichhapor 3 km	Surat 14 km	Surat 14 km
8	Mora	"	Kavas 7 km	Surat 19 km	Within village	"	"	Ichhapor 10 km	Surat 19 km	Surat 19 km
9	Sunvali	"	Bahatha 10 km	Surat 22 km	"	"	"	Ichhapor 12 km	Surat 22 km	Surat 22 km
10	Rajagari	Sunvali 1 km	"	Surat 21 km	"	"	"	Ichhapor 11 km	Surat 21 km	Surat 21 km
11	Vansava	Within village	Damaka 1 km	Surat 19 km	"	"	"	Damaka 1 km	Surat 19 km	Surat 19 km

TABLE No. 3.5—contd.

Sr. No.	Name of Village	Cinema	Hospital	Public health centre	Clinic	Doctors	Bank	Community centre	Marketing centre
1	Asarma	—	—	—	—	—	—	—	—
2	Bhatlai	Surat 19 km	Surat 19 km	Damaka 2 km	Ichhapor 9 km	Within village	Damaka 2 km	Sarpanch house	Surat 19 km
3	Bhatpor	Surat 10 km	Surat 10 km	Surat 10 km	Ichhapor 2 km	Bhatha 2 km	Bhatha 2 km	Gram panchayat office	Surat 10 km
4	Damaka	Surat 20 km	Surat 20 km	Within village	Ichhapor 18 km	Within village	Within village	„	Surat 20 km
5	Hazira	Surat 28 km	Surat 28 km	„	Ichhapor 10 km	„	„	„	Surat 20 km
6	Ichhapor	Openair cinema	Surat 10 km	„	Within village	„	„	„	Surat 10 km
7	Kavas-Limala	Surat 14 km	Surat 14 km	Ichhapor 3 km	Ichhapor 3 km	„	„	„	Surat 14 km
8	Mora	Surat 19 km	Surat 19 km	Ichhapor 10 km	Ichhapor 10 km	„	Damaka 3 km	„	Surat 19 km
9	Sunvali	Surat 22 km	Surat 22 km	Within village	Ichhapor 12 km	Damaka 6 km	Damaka 6 km	„	Surat 22 km
10	Rajagari	Surat 21 km	Surat 21 km	Sunvali 1 km	Ichhapor 11 km	Damaka 5 km	Damaka 5 km	„	Surat 21 km
11	Vansava	Surat 19 km	Surat 19 km	Damaka 1 km	Ichhapor 9 km	Damaka 1 km	Damaka 1 km	Sarpanch house	Surat 19 km

ANNEXURE TABLE II : Industry and Trade in Hazira Region

Sr. No.	Name of village	Industries				Number and type of shops									
		Large scale industries	Small scale industries	Flour Mill	Rationshop	Grain shops & other things	Pan Center	Provision & Gen. Stores	Vegetable Shop	Hair dressing saloon	Tea Shop	Radio & Watch Repairing	Utensil shop	oth Merchant	Shoe Center & Repairing
1	Asarma	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2	Bhatlai	—	—	1	—	4	—	—	—	—	—	—	—	—	—
3	Bhatpor	GIDC, IOC GAIL, ONGC	—	2	1	4	—	—	—	—	—	—	—	—	—
4	Damaka	—	Diamond Mill-6 Bidimaker-6	7	2	15	2	5	15	—	—	—	—	5	—
5	Hazira	—	—	6	1	9	—	—	—	—	—	—	—	—	—
6	Ichhapor	—	Garage-1 Diam. Mill-3	5	1	6	3	—	3	2	1	—	—	—	—
7	Kavas-Limala	KRIBHCO ONGC	Lathe Machine	2	1	7	10	7	2	3	7	R3+ W1 =4	3	3	C2+ R2 =4
8	Mora	L&T, NTPC Reliance	Machine	2	1	7	1	—	—	1	—	—	—	—	—
9	Sunvali	—	—	4	2	7	—	—	—	—	—	—	—	—	—
10	Rajagari	—	—	1	—	2	—	—	—	—	—	—	—	—	—
11	Vasava	—	Diam. Mill-2 Steel cutter-1	4	—	10	—	—	—	—	—	—	—	—	—
TOTAL		—	—	35	9	71	16	12	20	6	8	4	3	8	4

ANNEXURE TABLE III : Type of houses in Hazira Region

Sr. No.	Name of village	Type of Housing			
		Pucca (R.C.C.)	Pucca (Traditional)	Semi-Pucca	Kutchra
1	Asarma	—	—	—	6
2	Bhatlai	—	40	100	92
3	Bhatpor	15	265	170	—
4	Damaka	15	350	221	150
5	Hazira	25	75	340	450
6	Ichhapor	150	325	100	350
7	Kavas-Limala	50	200	10	52
8	Mora	15	160	49	52
9	Sunvali	8	140	17	300
10	Rajagari	—	15	94	70
11	Vansava	5	150	102	150
TOTAL		283	1,720	1,203	1,672

ANNEXURE TABLE IV : Education status attained

(No. of persons)

Sr. No.	Name of village	Technical	College	High School
1	Asarma	—	—	—
2	Bhatlia	14	20	135
3	Bhatpor	3	15	300
4	Damaka	50	30	400
5	Hazira	50	25	225
6	Ichhapor	30	65	325
7	Kavas-Limala	15	20	120
8	Mora	12	40	150
9	Sunvali	20	7	100
10	Rajagari	4	—	10
11	Vansava	20	10	90
TOTAL		218	232	1,855

3.7 Major Observations

The selected 11 villages have been surviving on rain-fed agriculture. About half of the land is not cultivable. The level of social services in the region is also far from satisfactory. The proposed industrialisation will on one hand displace agriculture workers and on the other

hand create opportunities of additional employment. Though impact of industrialisation has not been fully understood by the local villages, discussions reveal that they expect more employment, income and better level of services. Additional opportunities in trade and service sectors have also been identified as positive aspects of industrialisation.

CHAPTER IV

INFRASTRUCTURAL DEVELOPMENT

Infrastructural development needs for Hazira region and in terms of energy, water, housing and transportation have been presented in this section.

4.1 Energy

Since the State of Gujarat is passing through a phase of acute shortage of power supply the industrial growth at the present rate is mainly contingent upon the power supply situation. The industrial growth rate in the State has reached 10 per cent compound growth per annum. This might require 6000 megawatt power supply by 2000 AD against 24000 megawatt capacity at present. In the absence of coal the state will have to resort to either nuclear or gas-based power stations.

As far as supply of natural gas is concerned the G.A.I.L. has already built a gas compressor station which will utilize about 189,312 M³/day natural gas. Large scale industrial units could build up small captive plants on the lines of L&T or GAIL.

If the planned Kawas gas project is delayed for considerable time, there might develop a situation of power crisis. This may slow down the expected rate of industrial growth.

At present supply of power in Hazira region is arranged by GEB through their sub-station at village Vav which is at a distance of 33 kms. from Hazira. The construction power is supplied through Rander rura feeder. A 66 KV D/C Vav-Kawas-ONGC line is under construction. The power supply situation has reached a saturation level. This situation may not improve considerably till the Kawas gas project become operational.

In the Seventh Five Year Plan provision for installing a new 220/66 KV sub-station at Kawas has already been made. The GEB is planning to have the following lines from this sub-station

A. 220 KV Double/Circuit line:

1. 220 KV D/C line from Vav to Ichhapor sub-station.
2. 220 KV D/C line from Ichhapor gas based N.T.P.C. Power House.
3. 220 KV D/C line from N.T.P.C. Power House to Navsari sub-station.

B. 66 KV D/C Lines:

1. 66 KV D/C Ichhapor to Reliance site near Hazira and near gas based power station.
2. 66 KV D/C Ichhapor L&T Lines.
3. 66 KV D/C line for power supply to M/s Heavy Water Project near KRIBHCO.
4. 66 KV S/C line from Ichhapor S/S to 66 KV Jahangirpura S/S.

4.2 Housing

In the context of increasing industrial activity residential facilities will become crucial aspect of development of this region. If the housing schemes lag behind the industrial growth the total pressure of population growth might have to be borne by the already congested Surat city. Growth of this city might become more chaotic and assymetric.

Some of the large scale units have already built or planned township to meet their housing demand. The major problem will be faced by the small scale and medium scale which may not plan or afford such type of townships. Moreover, to cater to the needs of industrial sector this region may give rise to service population which is 4 or five times larger than the industrial population. This means an urban population comparable to the size of Surat might have to be accommodated in the area earmarked by the concerned authorities.

In HADA Development Plan an area of 380 hectares is reserved for housing over and above other pockets of areas are reserved as residential zones to be developed by private owners. A pocket of 186 hectares of land is also earmarked to be developed as a commercial centre by HADA. Besides that the housing sites are earmarked for ONGC, L&T and IOC at magdalla on the other side of river Tapi on Surat Dumas road, various pockets for housing by G.I.D.C. are reserved in the development plan i.e. about 326 hectares at village Ichhapor and Bhatki, 75 hectares at village Magadalla on the other side of river on Surat-Dumas road at the eastern approach of Ichhapor-Magdalla bridge over Tapi.

4.3 Water Supply and Sanitation

Water supply and sanitation planning appears to be at primary stage in this region. Water supply from Kakarapar canal with 100 Million Gallon per Day (MGD) for industrial use seem to be adequate for initial stage. However, a filtration plant does not exist for drinking water supply. Planning for drainage and sewerage is yet to be evolved. The Government of Gujarat has identified G.I.D.C. as a nodal agency for water supply scheme for industrial requirement.

It is proposed to develop a 100 MGD water supply scheme for this region based on Kakarapar reservoir. The first stage scheme shall be for 50 MGD to cater to the demand projection upto 1990 AD. The gross cost of the 50 MGD scheme works out to Rs. 75 crores resulting into cost of Rs.1.5 crores per MGD. This contribution from the participants on pro-rata basis shall be Rs. 1.5 crores per MGD. The water supply project of GIDC only consist of bringing water from Kakarapar weir to Hazira for industrial use only and

individual units shall have to make their own purification arrangement.

For drinking water all village depend upon Kakarapar canal supply and their individual bore wells and overhead reservoir tanks. The Gujarat Water Supply and Sewerage Board has envisaged Hajira water supply project with an estimated supply of optimum capacity of 2.65 million litres per day for 17 villages out of which 11 villages of Hazira area will be provided water.

4.4 Environment

Hazira region requires special attention from the vantage point of environment. Most of the industries in the region are gas based and chemical industries are going to dominate the scene. Regional office of Gujarat Water Pollution Control Board has suggested strict standards for these units. All these units will have to set their own water treatment plants. This is to check pollution of "estuarine zone" as Hazira is the place where the river Tapi meets the Arabian sea. The Board is also planning to initiate a research study on pollution control in the region.

4.5 Transportation

At present Hazira is connected with Surat by an existing long asphalt road. Another linkage from Kosad to Ichhapor-KRIBHCO-Magdalla is already constructed by PWD and this linkage further proposed to be connected with Surat-Udhana road at Sachin via Vanz to National Highway near village Palsana. A bypass road passing through Ichhapor, Bhatlai, Damka, etc is also proposed in the plan for reducing the traffic pressure on existing Surat-Hazira road, which is further extended upto Hazira through villages Mora-Suvali. Two more bridges, over river Tapi river at Athwa Gate and Magdalla are under construction.

A broad-gauge railway line has already been laid from Gothan-Kosad upto KRIBHCO at Ichhapor. This will provide further linkages to other industries in the area such as ONGC, NTPC, L&T, GIDC Estate, etc.

Thus Hazira region is already provided with easy road and rail linkages connected with National Highway No. 8.

Hazira region also has a locational advantage of river/sea transportation. Surat is known to be an

ancient port where cargoship of 1000 tonnes have sailed through Tapi river. Today however small ships of 70 tonnes are able to navigate during high tides. This is due to the fact of heavy siltation and absence of any continued efforts to maintain the draft through dredging. The existing channel from Surat Anchorage to Magdalla has many problems.

- (a) It has natural channel with meandering path.
- (b) Navigation is heavily dependent on day and night navigation works.
- (c) It has been dredged to a depth of 1 m below chart datum and dredging is in progress by the Gujarat Maritime Board to increase the depth of the channel progressively from 1 m to 2 m and may be at a later stage 3 m. CWPRS at Khadakwasala, Pune is having hydrographic model of river Tapi which requires updating the model for proposing modification to channel alignment dredging requirements, flood protection measures delineation of high flood line etc. for all this purpose CWPRS model at Khadakwasala requires to be updated with upto date ground levels and contours of the on the bank of Tapi. This work is entrusted to State Irrigation Department with a provision of Rs. 5 lakhs made by industries, mines and energy department for the study required to be carried out in consultation with CWPRS

4.6 Communication

For the communication needs Hazira area at present is not provided with proper telephone and telex facilities. In future this will create traffic congestion on surat telephone exchanges. Telephone Department has included 2K exchange at Kawas in the Seventh Plan with a view to expand it to 5 K exchange during Eighth Plan. For this electronic digital type exchange a site of 12 hectares is earmarked near KRIBHCO at Kawas for the Telephone Department, Regional Training Centre, Staff Quarters, etc.

4.7 Conclusions

Though an investment of more than Rs. 8000 crores is envisaged in Hazira region, there is no co-ordinated programme for infrastructural development in the region. Unless specific steps are initiated immediately, the pace of development in the region is expected to slow down.

CHAPTER V

ESTIMATION OF SERVICE POPULATION AND COST OF DEVELOPMENT

5.1 General

Analysis of proposed industrial set up in Hazira region reveals that a large number of jobs will be generated in the unorganised sector. There is need to plan for their infrastructural requirements. As a first step, an estimate of the service or target population has been made. This is defined as population which is dependent on unorganised sector.

5.2 Estimation of Target population

The projections of labour force has been made for two scenarios. Scenario 1 (S1) is a low growth situation without full-fledged petro-chemical complex. S2 scenario assumes development of a full-fledged petro-chemical complex in the region.

The total number of workers in S1 and S2 are estimated to be 34 and 124 thousand respectively (Table 5.1). Assuming that a certain proportion of them will stay in the region, it is estimated that population of region will be 1.2 lacs for S1 and 41 lacs for S2. The target service population for S2 scenario is worked out to be 1.95 lacs or 49 thousand households.

5.3 Cost of Development

It is proposed to provide basic housing and infrastructure to the target population. Cost of developed plot is assumed to cost Rs. 3000. Basic shelter will cost Rs. 10,000 per household. Cost of providing shared water supply and sanitation will be Rs. 1500 per household.

TABLE 5.1 : Estimation of Target Population for Service Sector

Item	S1	S2
A. Employment		
Organised Sector—		
1. Large scale industry	11,000	19,000
2. Ancillary industries tertiary activities	6,000	40,000
Sub-TOTAL	17,000	59,000
3. Unorganised service sector	17,000	65,000
TOTAL	34,000	1,24,000
4. Workers who will stay within study area		
(a) % to total	60%	75%
(b) No. of workers	20,400	93,000
B. Population		
1. Migration	81,600	3,72,000
2. Existing	36,000	36,000
TOTAL	1,17,600	4,08,000
C. Target—Service Sector		
1. Population*	40,800	1,95,000
2. Household	10,200	48,800

S1 = Without full-fledged petro-chemical complex.

S2 = With full-fledged large-scale petro-chemical complex.

*For S1 and S2, 60% and 75% unorganised service sector workers respectively have been assumed to be target group.

In S1 scenario, the total cost of developing shelter, water supply and sanitation comes to about Rs. 15 crores for the 10200 households. Similarly in the second phase the total cost could be estimated as Rs.71 crores (Table 5.2).

If the preceding costs for developing is seen from the perspective as percentage of the total industrial investment, then this amount appears to be negligibly small. In the S1 scenario it is only 0.3% and only 0.9% in the S2 scenario (Table 5.3). However, the total

cost is sensitive to land area and if calculated at cost per hectare of industrial area it appears little high. In the S2 scenario it is Rs. 1.87 lacs per hectare.

5.4 Institutional Arrangement

The HADA has already been created to tackle to plan and control the development activities of this region. However, this agency does not enjoy independent status as yet from the SUDA. In the long run as the

sphere of development activities widens the HADA might require independent administrative status.

GIDC is the most important implementing agency in the area. It is responsible for acquiring land for large-scale industries, it is the nodal agency for water supply and it is also developing an industrial estate in the region. GWSSB is the agency responsible for providing drinking water supply and sanitation. Roads are responsibility of Roads and Buildings Department. Co-ordination among various agencies is missing.

TABLE 5.2 : Estimated Cost of Development for the Target Population (Service Sector)

Item	S1	S2
1. No. of households to be covered	10,200	48,800
2. Cost of development per household		
(a) Plot (Rs.)	3,000	3,000
(b) Shelter (Rs.)	10,000	10,000
(c) Water supply and sanitation (Rs.)	1,500	1,500
3. Cost of development (Rs. in crores)		
(a) Shelter	10.2	48.8
(b) Other (land and services)	4.6	22.0
TOTAL (Rs. in crores)	14.8	70.8

TABLE 5.3 : Some indicators of Cost of Development for Service Sector

Item	S1	S2
1. Total cost (Rs. in crores)		
(a) Development of service sector	14.8	70.8
(b) Investment in industry sector	4480	8125
2. Total industrial area (ha.)	2900	3767
INDICATORS		
A. Cost of Development to total investment in industry sector (% a to b)	0.3	0.9
B. Cost of Development per ha. of industrial area (Rs. in lacs)	0.51	1.87

5.5 Suggestions

At present, there is financial arrangement to cater to the needs of the service population. The development plan prepared by HADA has earmarked some area for housing. However, unless the development plan is followed up with an action plan, the proposed land uses will not develop at appropriate location.

In this context, it is suggested that all the large-scale industries will provide 10% of their land for the service population. These lands will be pooled together at 3 locations in the region. In case, any particular industry is not able to provide land, then it should bear cost of acquiring this land. Concept of land adjustment may also be used for this purpose.

The three locations, which may be termed as 'Service Population Nodes' should be developed either by GIDC or GHB. Various options of shelter from no plot development to basic shelter should be provided in these nodes. The implementing agency should be allowed to sale 25% of the developed land for commercial and MIG/HIG residential housing. Cost of providing off-site infrastructure to these nodes should be borne by the state government. Cost of on plot development should be recovered from the target household in form of monthly instalments. HUDCO can provide loan for development of these nodes. Housing should be constructed on basis of self-help or self managed approach.

Overall planning and monitoring of the nodes should be responsibility of HADA.



सत्यमेव जयते

VISAKHAPATNAM : A SITUATIONAL ANALYSIS OF ITS PROBLEMS AND PLANNING EFFORTS





सत्यमेव जयते

VISAKHAPATNAM : A SITUATIONAL ANALYSIS OF ITS PROBLEMS AND PLANNING EFFORTS

Introduction :

The Visakhapatnam—once 'a sleeping village at the turn of the century on the coramandel coast on the eastern sea-board of India is poised to become a burgeoning metropolis as it marches on into its twenty first century. A shining example of the newly emerging industrialised India' proclaims the special memorandum presented to the Prime Minister by the Visakhapatnam Urban Development Authority on 11th April 1986. It goes on to answer how this metamorphoses was achieved due to the magnet of massive central investment and adds that such investments, such industrialisation have also brought about an unprecedented migration into the city.

The city's topography is characterised by undulated terrain with many ups and downs, surrounded by two hills in the north and south and with a gradual slope towards the Sea.

Urban Vizag—A Brief Historical Note :

The Visakhapatnam town can trace its history to the administration of Kulothunga Chola of the 14th century. As per the 'sasana' available in the Simhachalam temple, the town was in existence as early as 1089 AD. The town gained importance during the days of British Rule. It became a municipality in 1858 AD.

The population of the town was around 40,000 in 1920, 1,80,000 in 1955 and 5,58,000 in 1981. Visakhapatnam town was upgraded to a Municipal Corporation in the year 1979.

Visakhapatnam city is situated on the east coast of the country 776 kms. North-East of Madras and 876 kms. South-East of Calcutta. It is bound by Bay of Bengal on the East, a group of Hills looking like pyramids on the fringe of the tidalswamp on the West, Simhachalam range of hills which is a continuation of the

Eastern Ghats on the North and Do phin's Nose about 1500' high projecting into the Bay of Bengal on the South.

All these make the landscape of the city still one of the finest in the country. The city grew its importance on account of heavy industrialisation in the past two decades. The major industries include Hindustan Ship-yard, The Hindustan Petro Chemicals Limited, Coramandel Fertilizers, The Bharat Heavy Plate and Vessels, The Hindustan Zinc, The Hindustan Polymers and now with the Steel Plant and several ancillaries which cater to the needs of these major industries.

On account of the hill terrain, ridges and undulated surfaces the city has different levels at different points. A ridge runs from North East to South-West along the centre of the city and there is another ridge running from West starting from the Siripuram area and terminating near the hill at St Joseph's College. The highest level in the city is +213.50 ft. near Siripuram junction and the lowest is +4.90 ft. in the South-West portion.

The Visakhapatnam City has also witnessed the extension of the Eastern Naval Command and the commissioning of the outer harbour. Visakhapatnam is also a major educational centre with the Andhra University district headquarters as also the divisional headquarters of the South-Eastern Railway. The area of the City is 76.33 sq. kms. with an estimated population of about 8 lakhs as of 1986. The projected population of the urban complex on account of the steel Plant and its multiplier effects is estimated to be ten lakhs by 1991. None of the infrastructure facilities such as water supply sanitation, transportation and housing commensurate with the growth of the population resulting in serious constraints on city's development planning. The misery is compounded by air pollution and congestion in the city.

TABLE 1 : Infra structures and Facilities—Need & Supply

Need	Supply	Shortage	Year
<i>Domestic Water</i>			
40 Gallons/head/day	9.5 M.G.D.	30.5 M.G.D.	1986
	30.5 M.G.D.	**	1991
<i>Industrial Water</i>			
24 M.G.D.	14. M.G.D.	10 M.G.D.	1986
24 M.G.D.	8 M.G.D.	16 M.G.D.	1987
79 M.G.D.	*	**	1991

** Under Raiwada River (approved); Yeleru (approval awaited); Polavaram (at the proposal stage).

Water Supply :

About 52.2% of the municipal households which have tap connections receive water supply of one to two hours per day. Some of the areas such as Malkapuram, Sriharipuram, Shantinagar, Indiranagar and Butchirajapalem do not have any Municipal Water supply. Households who are dependent on public taps accounts for 26.2%. The per capital consumption of water is 11.2 Gallons/day/person. The large and medium industries make a heavy demand of the existing water supply and take away 2/3rds of the quantum available.

The pipeline system which was laid in the year 1903 in the older parts of the city needs urgent replacement as also it is necessary to remodel the existing pipe line system in other areas and it would be equally necessary to lay pipe lines in areas which do not have any water supply. This alone would require according to estimates of Vishakhapatnam Urban Development Authority (VUDA) about Rs. 381.11 crores, based on calculations prior to March, 1986.

In the year 1981 the Visakhapatnam town had a water supply of 219.00 lakh gallons per day from all the sources of which approximately forty one percent of water consumption was for the domestic needs of the town at an estimated per capital consumption of 18 gallons per head/day which was far behind the norm of 40 gallons per head/day. In 1985, the domestic consumption of the city was 80 lakh gallons per day with a per capita consumption of 11 gallons per head/day even taking into account the public and private borewells.

TABLE 2: Showing Water Bulk Consumption Position

Industries :		
1. Coramandel Fertilizers	18.0	Lakh Gallons/ per day
2. Hindusthan Polymer	8.0	
3. BHVP Ltd	6.0	
4. Industhan Petro Corp.	5.0	
5. Union Carbide	1.0	
6. Hindusthan Ship-yard	4.0	
7. Hindusthan Zinc	25.0	
8. Naval Project DGNP	20.0	
9. Steel Plant Construction	10.0	
Others :		
10. Port Trust	12.0	
11. Railways	9.0	
12. Military Eng. Services	7.0	
13. Vishaka Dairy	0.75	
14. Gujuwaka Elec. Sub Station	0.50	
15. Andhra University	1.25	
16. King George Hospital	1.25	
17. Auto Nagar	0.50	
TOTAL	129.25	

The projects included in the scheme are Raiwada Malkapuram, Jhanjawati and Tatipudi linkage. The per capita consumption taken into account as of 1985

is 15 gallons/day/person, a shade better in imagination than the reality of less than 10 gallons/day/person as of now.

The two most important potential sources of water for Visakhapatnam are the Yeluru Reservoir Project with an estimated investment of Rs. 147.02 crores (SSR 1979-80) was sent to the Central Water Commission during April, 1980. This project is contemplated to have two phases. In phase 1, the project envisages construction of head works and left canal for supplying 69 M. G. D. of water to the Vishakhapatnam Steel Plant as per the commitment of the State Government, and is expected to provide irrigation to 27,360 ha. of the existing part ayacut under the open head channel system of Yeluru river till such time other alternatives are found. The Hydrology (availability of water) has been tentatively cleared by the Central Water Commission accepting the dependability of 75% yield in the range of 15.3 to 15.5 TMC inclusive of upstream utilisation of 3 TMC. The project awaits clearance of the department of Environment and Forests, Govt. of India.

The Raiwada reservoir scheme with an estimated investment of 10.70 crore (1983) across the Sarada river is likely to yield 2 M. G. D. in the first phase which is under construction, the second and third phases of which await administrative approvals are likely to yield another 12 M.G.D. The Janjavathi river project is an inter state project between Orissa and Andhra Pradesh with an estimated to yield 70 M. G. D. is yet to be discussed by the two Chief Ministers of these states. Also one really wonders whether these medium and minor irrigation projects with the ruthlessly deforested catchments will ever yield enough to irrigate the command areas, let alone quenching and teeming people and industrial units at Visakhapatnam.

Sanitation :

In the year 1914, a thought was given to have a drainage system for the Visakhapatnam town. A scheme combining Storm Water and Sullage Drains was investigated between 1926 and 1928. The scheme was to take care of pressures of population growth of 60,000 to be attained by the year 1951. The cost of the scheme was estimated to be Rs. 21,14,000 to install and Rs. 23,000 to maintain annually.

A sub division of the Public Health was formed in the year 1955 for intensive survey work. An ultimate population of 2,50,000 to be attained in 1991 and a prospective population of 1,82,000 to be attained in 1976 were considered for the design.

The town was divided into 10 blocks out of which only 7 blocks were considered as fully developed and therefore detailed calculations were made only for the seven blocks and approximate figures arrived at, for the rest of the three blocks. Block 1 area was taken up for sewer lines leaving the treatment works as the site for treatment works was not yet finalised. An estimate of Rs.10.08 lakhs was technically sanctioned by the Chief Engineer (PH) in 1969 for this work in supersession of the earlier sanctioned estimate of the year 1964.

While the work was in progress treatment works consisting of grit chambers and erected lagoons which

required pipe lines connecting pumpsets etc. for capacity of 0.6 mgd. these were sanctioned technically for Rs. 8.25 lakhs by the Chief Engineer (PH) in the year 1976 and the same was taken up for execution and completed. The scheme for the block 1, area was handed over to the Municipality.

TABLE 3 : Sewerage/Drainage

Feature : Open Drainage System	Dust Bin 37.6% = 100%
Solid Waste & Garbage disposal	on the streets 52.4%
No. of Public Lavatories	7% of the population covered

VUDA's Scheme :

To cover 13 blocks with comprehensive underground sewerage scheme at the cost of Rs. 31.50 crores. To develop Major Hill Streams (storm water drains) Rs. 8.15 crores plans have been drawn up.

TABLE 3 : Existing Sanitation in Vizag City (1984-85 figures)

1. No. of House holds using Bucket type Latrines .	541
2. No. of House holds using Dry type Latrines .	24,357
3. No. of House holds using Open space .	25,981
4. No. of House holds using Septic-Tank Latrines .	74,965
5. No. of House holds using Public Lavatories .	9,472
TOTAL	1,35,316

Plans for Low Cost Sanitation :

The Govt. of Andhra Pradesh with a view to ameliorate the living conditions of Scavengers, has been making several efforts. One such measure is to convert insanitary type of latrines into sanitary pour flush latrines which will render abolition of the practice of manual handling of the night soil.

A World Bank study pointed out that over 50 infections can be transferred from a diseased person to a healthy one by various direct and indirect routes involving excreta.

Hence, the present system of cleaning and removing faecal matter manually and the practice of open air defecation which poses a serious health hazard to the community, should be put to an end at the earliest. It is with this intention that the State Government, the national Government and the UNICEF have laid great stress on the conversion of insanitary latrines into sanitary latrines in Urban as well as Rural areas.

Existing Sewage Disposal and Drainage System :

Only a small part of Vishakhapatnam city is served by an underground sewage system and the sewage collected is disposed off at the Sewage Farm-pump house after treatment into the Lavender Canal which in turn joins the sea. A part of the treated sewage is utilised to raise green grass which is fed to cattle. If the remaining part of the city is to be covered by an underground sewage system, it is expected to cost over 20 crores of rupees and the finances of the Corporation do not permit such a huge expenditure. Hence, it is decided

to take up the construction of low cost pour flush latrines with on site disposal.

The city has a population of 8 lakhs as of now. A survey of the residential houses conducted recently by Revenue wing of this Corporation in terms of street survey and information was collected on the position and number of latrines and the social status of the various families both with and without latrines. As per the survey there are 49,500 residential houses, of this 17,450 houses have sanitary type of latrines and 8,200 houses with insanitary type of latrines and 23,850 houses do not have any latrines. Most of the houses without latrines and with insanitary type of latrines belong to Economically Weaker Sections and Socially Backward classes. The areas in which most of the insanitary latrines and latrine-less houses are located are in the old town, on the hill slopes and in 170 slums spread over in the town and other congested localities like Pthanidibba, Ramajogipeta, Kothaveedhi, etc.

Among the community latrines 92 are septic tank latrines and 34 are dry earth type latrines. Six of these septic tank latrines are connected to the underground drainage.

The 34 dry earth public latrines will be converted into septic tank latrines. This project envisages conversion of all the insanitary type of latrines in the city (8200) besides construction of 23,650 sanitary type latrines in latrineless households.

Finance :

Since most of the householders are below the poverty line and since the proposal is to complete the conversion programme at the earliest within a period of three years the method of finances should be literal. So it is proposed to obtain 50% of the total cost as grant from the State Government/Central Government and 50% as loan. For the loan component of 50% the HUDCO will be approached. For the loan sanction by HUDCO 5% interest will be collected from *Economically Weaker Section* households and 10% interest from MIG & HIG households. The loan amount and interest will be recovered in 40 instalments.

Habitat :

The Visakhapatnam urban area has been divided into 50 wards by the municipality. These wards constitute 71 localities. According to the 1981 census the population of the Vizag was 6,03,630 over an area of 94.50 sq. kms. The population projection for Visakhapatnam for 2001 AD has been estimated in a study by using the Geometric Mean Method, to accommodate the likely migration due to enormous industrialisation that is taking place right now and which will increase over time. It is estimated that by 2001 AD the Vizag city will have a population of 16,59,982.

Shelter :

Rapid growth in population in the urban areas of Vishakhapatnam Metropolitan Region (VMR) in general and Vizag city in particular largely due to migration of the work force towards these two areas has generated

considerable demand for Housing. Presently there is substantive housing shortage. As an alternative, one

finds enormous growth of slum housing sans any facilities for safe and hygienic living.

TABLE 4 : *Rented and Own Housing Position*

1. Rented	52.8%	1. No. of Kutchra Houses	54,310
2. Own	47.2%	2. No. of Pucca Houses	1,20,136

TABLE 5 : *Distribution of Housing by materials used*

Material of Wall		Material of Flooring		Material of Roof	
1. Mud	7.8%	1. Mud	8.4%	1. Concrete	61.6%
2. Cement	38.6%	2. Cement	86.4%	2. Asbestos	2.4%
3. Stone	46.8%	3. Mossaic	5.6%	3. Thatched	18.0%
4. Concrete	6.8%	4. —	—	4. Tiles	18.0%
TOTAL		100.00%		100.00%	

In the year 1965, 0.51 lakh people used to live in slums. As per the 1985, VUDA figures, it is estimated that more than 2.0 lakh people live in the slums. About 200 identified slums in the urban complex have witnessed a three fold increase in over two decades time. Even according to the existing slum population, the shortage of housing works out of 40,000 units, at an estimate of Rs.60 crores.

TABLE 7 : *Conservative Estimate of Housing Requirement*

Population 1981 Census	Shortage of Housing*	
1. 1981	6,03,630	55,000 Units
2. 1985 (est.)	8,00,000	72,900
3. 2001 (est.)	16,59,982	1,51,250

*Estimated by the author.

The average number of dwellings required to be provided annually works out to 14,500 for the period between 1981—85 alone. If we use an ideal shelter form of a dwelling for every five persons and hope to cover atleast the reported kutchra shelters the back log alone amounts to over 40,000 units.

The density of Population as per 1981 Census was around 7,406 per sq.km. As of 1985 the Population of Vizag was estimated at over 8,00,000 and its density works out to 10,480 per sq.km. By 2001 AD. it will touch a whooping density of 21,746 per sq.km.

Impact of Industrialization on Housing :

The Rents have increased four fold. No land lord in decent and livable areas wishes to rent his house to more salaried classes which have fixed HRA. The Banks merely lease accomodations, so do Companies. There appears to be no plans whatsoever with the authorities for subsidised housing. Whatever housing activity is going on in Viizag is due to operation of free market forces.

The Visakhapatnam Urban Development Authority has been toying with the idea of developing Satellite Townships. The plan in simple terms is to declare land use specifications, make plots and auction them. Some percentage of the plots will be reserved for the weaker sections for allotment. The first auctions of the government lands are to take place in the proposed satellite township of Rushikonda which falls under the jurisdiction of VUDA. Rushikonda abutts the Vazag-Bhccemuni-patnam beach front. VUDA describes the Rushikonda area as 'an ecologically sensitive zone with subline valleys and beautiful hill slopes, VUDA hopes to attract a population of 1.30 lakh to be ultimately absorbed in the Rushikonda satellite town scheme.

Visakhapatnam Urban Development Authority has under its plans as many as fifteen identified locations for developing satellite. Under the first phase of development the VUDA plans to develop Rushikonda, Madhuvada and Kurmannapalem located at 10 to 15 kms. away from Visakhapatnam and they will be developed to accommodate a population of about four lakhs. The multiplier of the huge investment of Rs. 10,000 crores in the next 12 years or so around Vizag is bound to create enormous infrasturctural demands.

As an official at the Hyderabad liason office of the VSP observed the task before the State Government and the Urban Development bodies is stupendous. VSP has made its own plans and naturally is endowed with resources to meet the demands of at least 50 percent of its Employees housing needs. And as most Housing Colonies of Central industrial establishments go, the VSP township would have all the facilities of water, transport within, market places, recreation, parks as part of thier plans.

Taking about the satellite township concept the Hyderabad situation has been a different story. The Hyderabad — the state Capital mushroomed its industrial growth, already on the city's peripheries, townships of all kind, irregular and unplanned, uprooted

villages, have all transformed into some kind of facilities for human living. Market places came up because there was the need. Recreation and Cinema Houses, Bars and Super Markets, Linen dryers and construction material dealers and others saw the potential of a fascinating yet monstrous growth of the city and its unfolding industrialisation and all the market forces were let loose sans direction from Urban Development Authorities and any right intervention. The Hyderabad Urban Development Authority is hardly be able to recognise that its deep slumber of over a decades existence has already caused reckless development of the city. We have one more proof of Gajuwaka developments to cite in the absence of funds and proper planning.

Context of Rapid Industrialization :

In the last 35 years, phenomenal increase in population is attributed to the rise in number of public and private industries, developments of the ship-yard and the naval base, the port trust, etc. With the decennial growth rate of population during the decade of 1971-81, touching as high as 63.5% the population explosion naturally brought within its fold a number of problems. Primarily these problems that Vizag citizens are faced with pertain to absence of adequate transport facilities infrastructures; shelter; civic and community facilities.

The master plan of Vizag presented in the year 1970, also witnessed the decision of the Central Government to have a port based steel plant at Bala Cheruvu, 20 km. away from the city. After a prolonged delay the construction work on this plant commenced in the year 1981. Far reaching impact on the economic development and urbanization process in the region is inevitable, also perhaps this is the only major steel plant built in close proximity to a big and growing city. The Multiplier effect of the already existing corporate and public sector undertakings has also been noticed with the development of ancillaries- resultant service sector both formal and informal and concomitant pressures on the existing available social facilities, sanitation and infrastructures including Housing.

The present paper is to assess the impact spread of the project of steel plant on the region of Visakhapatnam and to take stock of various plans and contingency actions thought over by the State, the Steel Plant authorities, the other public sector undertakings, the Urban Development Machinery as a whole to combat inevitable degradation of human life situation in case the mess of several inadequacies of urban infrastructures and other related measures including complementary rural development are not addressed at.

Visakhapatnam as a district has a population with a share of 68.71 (1981 estimates) urban to 31.29 rural. With only one class II town—Anakapalle and three class III towns—Bhemunipatnam, Narasipatnam and Chodavaram, the population which serves industry and other service sector had the tendency to concentrate in the city of Visakhapatnam. This of course has left the whole district backward. There is hardly any interaction between the rural region of Visakh district and its urban counterparts beyond being a provider of vegetables, fruits, milk and firewood for the consumption of

the later. Modern technology, Green and White Revolution almost stop at this point and are merely dictated by needs of the city and its peripheries.

Those disgruntled with low farm yields and those who have reasoned out that real estate around the peripheries is more lucrative than agriculture and those of them who have picked up polytechnic qualification semi literate, job less and land less and a lot of others on several other reasons have been pulled into the compulsive ambit of the Vizag city. All migrants live by hope. Visakhapatnam would not tell us a different story. Very few have returned back to the remote rurals of the region. While several professionals/workers in the city continue to keep their farm operations going, by resorting to extra bit of work of commuting back and forth atleast weekly once.

The derived estimate of the net migration is significantly positive in planning Division I and planning Division II of VMR. The planning Division II which includes the Visakhapatnam city has shown 77% net migration. INCOR, earlier reported that 50% of the total migrants come from the immediate influence zone (IIZ).

Occupational Structure :

A study of the occupational structure of the Visakhapatnam city presents a number of changes in the last three decades. Prior to 1971 there was a reasonable agricultural activity going on in the city peripheries, but after inclusion of around 2000 sq. miles into the municipal limits it has declined from 1971 position of 4.93% to 1.67% in the year 1981. The household industry has shown an increase from its 1971 position of 1.27% to 5.3% at 1981. The work force in the manufacturing sector constituted a mere 3157 in 1951 and rose to 15,753 in 1971, constituting 13.4% as per the 1951 figures and 15.71% as per the 1971 census. The construction workers who belong to the city were 2442 in 1951, constituting 7.46% of the total work force. Trade and commerce constituted 11.9% of the work force, almost equivalent to the manufacturing sector. The most dominating employment is in the field of transport and communications, with the number of workers as 26,169 represented in 1971 out of which 14,000 were employed by the port trust itself. There was a decline in the service sector from 39.1% in the year 1951, to 31.24% in the year 1971. A update of the occupational diversity is absent in the 1981 census.

The city itself has undergone functional changes. From a service town in 1961 to service-cum-transport-cum industrial town in 1971, to industry-cum-transport town by the year 1981. The historic function of transport will undergo far reaching changes dominated by the industrial functions particularly after the Steel Plant commences its production.

In 1971, the agricultural economy dominated with 74.76% of the total work force and within a decade 73.98% work force was found to be engaged in non-agricultural activity in 1981. This is exclusively attributed to large scale acquisition of villages for the Steel Plant purposes, which caused large scale displacement from the agricultural occupations.

Land use :

The area under the VUDA is 1450 sq. kms. of which 76.33 sq.kms. is under the Municipal Corporation. The following table shows the existing land use pattern in the city, excluding the port area.

TABLE 8 : Existing Land Use Pattern

1. Residential use	8.69
2. Industrial use	5.20
3. Commercial use	0.35
4. Transport and Communication use	3.16
5. Recreation purposes	0.30
6. Vacant Land	10.96
7. Other uses (agricultural, public purposes, etc.)	9.88
TOTAL	47.54

The demand on two natural resources, land and water is stupendous. Land is simply not there within the city for any further house construction or for sale at reasonable prices. The solutions at the citizen level currently are :

1. High rise apartments; and
2. Getting away to Rushikonda Satellite Scheme and participate in the bidding at the auctions of VUDA and have of course find private ways and means to commute to the city back and forth as there would be little chance of mass transport to become a reality no sooner one builds his shelter. Once in accessible regions like the hills have been denuded and shelter forms have taken a rapid pace with anxieties of land slides and natural eviction sans facilities of drinking water, sanitation and healthy environment. This is expected when all economic activities of lucrative kind emanate from the city and people who are dependent on the city for wages in the informal as well as the formal sector have no means of expecting any deliberately, planned, sustained and organised delivery of Urban Services from the hands of the city's urban machinery.

The public land constitutes 65% of the total area available in Visakhapatnam city, out of which 40% is under the port Trust and as such not available. Private land constitutes 35% on which most of the city's dwellings, infrastructures, facilities sought by people such as markets, shops, theatres, banks, etc, exist.

For the Master plan of VUDA to become a reality atleast in parts it is essential that it either acquires some of these lands in the Central Business district and the town or acquire villages after villages in the periphery of the Visakhapatnam, make plots and sell them or lease them out. The ability to either generate its funds through such sales or by some merciful grant from the State Government or the Central Government or at the moment the two most remote possibilities. In the absence of such funds and creative outlook, the Master plan will have to be buried in places like Gajuvaka, which remains an apology for a ring town

The commercial activity which takes place in the city's main street was also proposed to be decentralised to avoid congestion and to synchronise with the re-organisation scheme of finding some hierarchies in the commercial activity of the city. According to a study a modest 10% was achieved in this direction.

The Master plan of 1970 did not attempt to visualise the coming of the steel plant in a big way. Strange though that the Plan of setting up of the steel plant was announced much before the Master Plan was being drafted, if not published and announced to public. Moreover even children and youth of the sixties remember to have witnessed a decade of high political drama for the location of the Steel Plant at Vizag.

We will now talk of another precious natural resource water. The district has precious little for agricultural operations. The existing Varsha, Sarda, Tandaval water already to the city. One has to wait for all those projects in the pipelines stuck at the desks of Central Water Commissions, Environment Ministry, etc. for clearance.

The Impact has already been felt in the steel plant construction area of 42 sq. miles accommodating the township, the fabrication units, railway network, marshalling yards and the jhuggis of the construction workers. During construction period the city supplies of water have been reduced from 18 to 10 Gallons per head/day. The city has no perennial and assured water supply. The small streams and rivers are fully utilised by the city denying a legitimate share to the rural region.

What then are the alternatives? 150 kms. away is a river called yeleru and all the other schemes described earlier.

What ever it is the Visakhapatnam Steel Plant and the other public sector undertakings also poised for growth will attract a population of 45 lakhs and plans on a war footing are being made to absorb a tiny population growth roughly 4.5 lakhs.

These plans only include modest housing, drinking and bathing water facilities, facilities which the steel Plant would make for its work force in its township. And as for the rest, the mess will have to be sorted out. Most citizens who get numbered in the Census and occasionally find their names in the Voters list have already started accepting thier fatal future. Their answers for instance are: in the absence of public transport, invest somehow in two wheelers, (mopeds, scooters, etc.) and in the absence of scooterable roads, use the sidewalks as it is causing a bit of discomfort to the hawker—licensed or the one who pays hafta to the police and also to the fellow citizen -pedastraints.

Central Investment in Vizag City:

The below given table is self explanatory. Economic activity of such magnitude will invariably have a maze of concomitant consequences manifested through ever surfacing problems of urban shelter, sanitation, sewerage disposal, pollution, transport linkages, water supply and other infrastructural needs.

TABLE 9 : Central Investment in Visakhapatnam--1985

1. Hindustan Ship-yard	100.42 Crores
2. Hindustan Petroleum Corp.	259.18
3. Hindustan Zinc	48.50
4. Bharat Heavy Plate	44.00
5. Indian Oil Corp.	1.00
6. Visakha Port Trust	204.00
7. Indian Railways	150.00
8. Eastern Naval Command	900.00
9. Visakha Steel Project	2000.00
TOTAL INVESTMENT	3707.10 Crores

*Total proposed by 1991 is 8500 Crores.

The Scenario of the VSP

Surrounded by Nadupura forest range on the Western side, Salt Pans on the North East, Pedakonda Hill range on the South East and the Bay of Bengal on the East, the Visakhapatnam Steel Plant and its township requires 27,157 acres of land equivalent of 43.43 sq. miles. The project area acquisition included 18 revenue villages forming 63 settlements.

The objectives of the steel plant project are:

- to achieve and maintain a labour productivity of not less than 230 tonnes/man year;
- to enrich the quality of life and work;
- to develop a well trained, motivated and talented work force which would form a nucleus for future development of the steel industry;
- to take measures for conservation of the environment;
- to act as a catalyst for the growth of ancillary industry and promote the welfare of the people of the area.

Land acquisition :

The land required by the VSP has been acquired by the State Government for Union of India under the amended land acquisition act of 1972. This act provides for acquisition of land as well as the payments of compensations at the rates prevailing as on 1-4-1966 or the date of notification, whichever is less. Till date the compensations paid were at the rate of Rs. 1890—2500 for an acre of Wet Land and Rs. 1050—1270 for an acre of Dry Land.

Union Government has apparently agreed to wake the compensations to Rs. 17,000 per acre of dry land and Rs. 20,000 per acre of wet land and Rs. 6 per square yard of land for a village cite. This has not been implemented so far and apparently there are no signs of resources in the offing.

Recently a Lok Adalat was held for disbursement of compensation to land-loosers to VSP. The Lok Adalat held with much fan fare took off several land-loosers by surprise when several of their cases for increased compensation for pending in the court of law. What appears strange is that a great amount of credibility has been lent to the programme of disbursements by the

presence of highest officials of the judiciary in the country.

The Prime Minister announced increased compensations. While several subordinate courts had decreed a higher amount. The officials of the conduct of Lok Adalat hurriedly by pushed through the papers, so that the only announced rate of Rs. 17,000 for dry and Rs. 20,000 per acre of wet land was paid.

According to the Newspapers a land-loser of Kanith village was granted an amount of Rs. 1.8 lakh for 3.20 acres by the court. But the formula of the Lok Adalat has reduced the amount of Rs. 51,000. Similarly, in another case, the compensation awarded by the Court was to the tune of Rs. 5.30 lakh, but the land-loser got only Rs. 2.20 lakh at the adalat.

The haste with which 'claims' of the land losers were settled, gives rise to the question whether the displaced and aggrieved would ever get justice from the courts of law.

Pollution Front :

Visakhapatnam is undoubtedly a continuously polluted city and is constantly adding up a lions share of stench as it moves into the 21st century. The pollution that one notices in the city as well as in larger tract of the VMR region is of aesthetic, odour, gaseous, liquid and solid disposal and noise pollution.

Some facts :

- On an average over 750 vehicles move in the city through 30 junctions with a contribution over to 75 dB noise level.
- Lack of adequate timely public transport and where available of poor quality has shifted the preference of the citizens to personal transport. About 48.69% of the residents of the Vizag city own their means of transport.
- The average suspended particulate matter found in the atmosphere in six locations of Vizag region has a base level of 104.16.
- The same would increase by the VSP's contribution to 132.66.
- The base levels of sulphur dioxide in these six locations is 34. It will go up to a whopping 66.33 with the VSP's contribution.
- The Nitrogen oxides found in the atmosphere is 10.8 and will go upto 19.0 with the VSP plant commencing its production. (Neeri estimates).
- All these atmospheric effluent extremely conservative based on application of a primary ethic that the Effluent Treatment Plants as described before getting the NOC from the Pollution Control Boards, are fully installed and are made to work to full capacity. The question always is that due to infrastructural supplies such as water and power being always in short supply, it is very likely that the ETP's rest a while or sometime shut up and then the atmosphere will loom with larger amounts

of SPM, SO₂ and NOX and a greater certainty of acid rains.

- We refer to concessions which are likely to be extended by CPCB and APCB not because they have no regard for Environment Laws but the lobby of industries is too huge to get away within the wake of less supplies of clean water and power for running the effluent treatment plants as also absence of the necessary technology.
- The EIA studies are not conclusive. The questions asked by experts committees only result in answers based on the existing base of data rather than investigations based on primary scenario.
- The costs of health risks are not to be paid by Governments, Public or Private Sectors unless grave calamities occur like the Bhopal but will be paid by uninsured common citizens who propel the urban and industrial system. According to medical evidence, the respiratory disorders in Mindi, Mulgadas and Gulla palem account for 50.44% of the blue collared population.
- The high pollution zone slums have 73.72% of the poor and 26.09% non poor reporting to diseases.
- In the low polluted areas we have 50.70% reported tend to diseases.
- In non slum but high pollution zones we have 50% of the population reporting to diseases.
- In villages which are high polluted, we have 84.21% of the population reporting to diseases.
- In low polluted villages we have 51% of them reporting to diseases.
- These may be sample based findings but they do represent a universe, a universe of high risk factor on grounds of health and environmental safety.
- It is futile to contest these figures emanating from scientific evidence forwarded to Department of Environment, Government of India, vide several research projects by the eminent professors of the Andhra University.

One the drinking water front :

- Ineffective chlorination of the various reservoirs at the point of chlorination after dilution and at the tap end is found to be very high. In the range of 100 ppm and 10 ppm (Town Service Reservoir).
- Ramakrishna puram area ground water is polluted due to seepage of sea water.
- The Harbour waters remain polluted by organic wastes from Hindusthan Polymers and Visakha Dairy (High COD values).
- The effluents from the Allumn factory contain high amounts of Aluminium, phosphate and several other inorganic impurities.

--The effluents from lead plant of Hindusthan Zinc has low PH and contents lead, cadmium, mercury and zinc and very high amounts of sulphate. Along with high alkalinity and hardness.

--Coramandel Fertilizers effluents contain high concentrations of free flouride, sulphate, calcium and phosphate. With the PH also being very low. These effluents directly go to the inner harbour. Over the years, they will destroy marine structures and marine ecosystems.

--The effluents of Hindusthan Petroleum have high concentrations of oil and greese.

--The narava basin water quality has been estimated to contain high concentrations of oil, greese, fluride, sulphate, etc.

--The economically important algal species and plants *culva fasciata*, *entromerpha compress*, *padina*, *tetrasromatica* and *sargassum illivi-folium*) have relatively higher bio mass weight wether dry or wet in non polluted areas when compared polluted areas.

--Histological studies of gills, liver and kidney of fish species showed their vulnerability due to water mass having irritant materials and disolved or suspended in the water.

--The carnivorous fish from Visakhapatnam coastal waters are found to be having high concentrations of non-essential metals such as Pb, Cd, Co and Ni, in their tissues. These concentrations above the threshold of 0.95 - 1.19 mg/kg. body weight are dangerous for human consumption. The concentrates found in carnivorous fish are above the danger level in case of all tissues excepting the muscle of the detritus feeder.

Industrialisation (large and medium industries) :

The region has recorded one of the highest rates of industrialisation in the State. Being on the Calcutta-Madras railway line, having well connected road network and more importantly, the location of port has given impetus to the establishment of large, medium and small industries in the city and its vicinity. There are as many as 39 large and medium industries located in the region and a large number of small scale industries with a reasonable diversification in the industrial structure. As per the study*, the total industrial employment reported was as much as 55,000 generating nearly Rs. 830 crores worth of gross output in the region.

In addition, steel plant and its ancillaries are likely to provide sizeable employment. The direct employment by steel plant in the construction phase has worked out to 24,635 (3,635 managerial and 21,000 contractual). Supporting employment assumed to be at the rate of 1:2 working out to 49,270 (7,270 managerial and 42,000 contractual). The total employment therefore is

*Preparation of Regional Master Plan for Visakhapatnam Metropolitan Region sponsored by Visakhapatnam Urban Development Authority, jointly carried out by Operations Research Group, Baroda and Environmental Planning and Design Consultants, Goa (ORG-EPD Consultants) 1986-87.

Sl. No.	Industry sector	Total Employment (Number)	Value of Output		Income generation	Wages
			Mfg.	Gross Value		
1.	Large and Medium	33,591	58768.64	73691.34	27619.07	5439.19
2.	SSI	21,441	5513.84	8960.02	5740.74	1302.67
TOTAL		55,032	64282.48	82651.36	33359.81	6741.86

Source : Survey on Industries by Operations Research Group, Baroda.

reported to be 73,905 (10,905 managerial and 63,000 contractual)†. The scenario is expected to be different by 2001. According to the study, the total projected employment is expected to be 91,000** of which 22,000 would be by direct employment and nearly 50,000 in service sector.

Small and Tiny Industries Programme :

As an important instrument of holding up the migration is the creation of employment and other infrastructure in the rural areas so that the extent of migration to the city can be reduced. Visakhapatnam district which is one of the backward districts of the State has a large number of rural artisans engaged in carpentry, khadi and handloom industries, handicrafts, etc. There is need to raise the level of productivity and earnings of the rural artisans, handloom, weavers, craftsmen and other employed in the region. In line with the Five Year Plans, the rural artisans complexes have been set up in the backward districts. The results of the

evaluation study† are quite revealing. The number of the artisan units has steeply fallen. While there were 584 units in 1980-81, the figure fell steeply to 155 in 1984-85. Out of 7 complexes, 3 complexes lack basic amenities such as electricity, pucca road, drinking water and sanitary conditions. In Yelamanchili in particular the toy makers are experiencing the greater hardship because of lack of power to drive their motors. Another interesting observation was the lack of adequate working capital to the artisans. In short, the following could be the requirements to help improve the artisans†† :

- The complexes should be provided with all infrastructural facilities.
- Provisions of adequate working capital.
- Provision of training to the artisans so that they will be able to use modern tools and equipments.

Distribution of artisan households trade in VSP district

Carpentry	Weaving	Pottery	Basket Making	Black-Smith	Cobbler	Oil Ghanny	Poly Fibre	Gold-Smith	Toys	Others
2999	879	815	561	466	370	282	273	192	110	60
(42.0)	(12.3)	(11.6)	(7.8)	(6.5)	(5.1)	(3.9)	(3.8)	(2.7)	(1.5)	(0.0)

Figures in brackets are percentage to total

Tanning Total

145 7152

Source : Artisan Survey, 1981-2, DIC, Visakhapatnam

(2.0) (100.0)

In view of the fact that the SSI units do not require heavy investment and at the same time provide more employment, it would be advantageous to develop these units in the rural areas. For instance, the employment provided per Rs. 1 lakh investment varies from 8 to 10 persons as shown in Table. Large scale unemployment

and disguised unemployment in the rural sector can be reduced through promotion of small scale, tiny cottage and artisan based industries***. This calls for strengthening the district industries centres, organising funding from the banks and also improving the marketing of the products.

†Regional Master Plan for VMR by ORG-EPD, op. cit.

**Total employment estimate is consumption demand based.

†Bhaskara Reddy, N and Samba Murthy, C, "Rural artisan complexes—A case study of Visakhapatnam District", *Andhra Pradesh Economic Association* (Fourth annual conference, Centre for Economic & Social Studies, Hyderabad, 1986), P. 19.

****Ibid*, p. 20.

***Lakshmana Rao, V and Ratnam C, "Rural Industrialisation in VSP district", *Andhra Pradesh Economic Association* (Fourth Annual Conference, Centre for Economic and Social Studies, Hyderabad, 1986), p. 10.

Year	No. of unit	Investment (Rs. Lakhs)	Investment per unit (Rs. lakhs)	Employment (Number)	Employment per Rs. 1 lakh investment
1981-82 . . .	143	131.15	0.92	1280.	10
1982-83 . . .	158	122.03	0.77	1171	10
1983-84 . . .	N.A.	N.A.	N.A.	N.A.	N.A.
1984-85 . . .	350	306.25	0.88	2582	8

Source : DIC, Visakhapatnam

Some Development Issues :

Although large industrial development has taken place in the region, the regional economy has not been able to take full advantage of the forward and backward linkages of such industrial growth. This is reflected both in high proportion of export of the products of large industries and a high import coefficient of purchases. Secondly, high capital intensity of the existing large industrial units has contributed to limited direct employments estimated at about 55,000 for VMR in 1983 which comprises only 11.7% of the total working population (taking only urban population it works out to about 19%).

Thirdly, rural industrialisation process has not been to the extent desirable. Rural economy has neither been able to take full advantage of the demand generated in the urban sector nor able to utilise fully available local resources (forest, minerals, agricultural products).

Fourthly, the growth prospects and planning strategy of SSI should also take into account the demand generated by the large industries either directly or indirectly through growth of construction, transport and service sector. Even as a part of rural industrialisation strategy, construction oriented and demand based industries should be promoted.

1. It is a well known fact that the irrigation facilities in the Visakhapatnam region are far less than its counterparts like East, West Godavari Districts and also Krishna District. Interestingly 75% of operational holdings are small holdings with less than 2 hectares, leading to low yield per hectare.
2. Irrigation facilities in general are poor in the Visakhapatnam district. Except Anakapalle area, the rest of the area depends on tank and well irrigation. Most of these sources are reported to be in a bad state due to lack of maintenance.
3. The poor yields of agricultural crops are also reflected in terms of low level of fertilizer

consumption which to a large extent is explained by absence of adequate and assured irrigation.

4. In view of the poor prospects for agricultural development in the region, it is necessary to depend on the allied activities particularly the agro-based industries such as fisheries (marine), dairy, poultry etc. These subsectors are capable of absorbing some of the rural folk and might tend to hold them back without migrating to Visakhapatnam city and take advantage of the induced demand created by the urban sector.

Displacement due to Steel Plant :

The study* carried out by the Economics Department of Andhra University reports a total of 36 villages affected a population of more than 38,500. As the participation rate of approximately 0.57, a workforce of 22,000. It is reported that the participation rate does not indicate any significant change in the pre and post evacuation stage, this workforce could be considered as the lower minimum that sought employment in and around steel plant area, immediately after rehabilitation. One of the substantial changes that has taken place in the area is the shift in the composition of workforce. For instance the shift in favour of non-agricultural activities works out to more than 70%.

On account of the displacement †, four types of disabilities were suffered by the evacuees. They are loss of employment, property income and health. The loss of income suffered due to acquisition of agricultural land is enormous. Out of 3556 households, 3195 households (90%) reported two disabilities namely loss of property and loss of income. Nearly 1070 families reported having suffered three disabilities namely, loss of income, employment and health. In addition, lack of medical facilities in the rehabilitation centres is offered as one of the reasons for bad health conditions of the families.

***Regional Economic Analysis for Visakhapatnam Metropolitan Region ORG, 1988, Study carried out for VUDA as a part of the preparation of Regional Master Plan for VMR;

*Ramana K. V. and Krishna, K.S. : Report on Impact of VSP Steel Plant on the Socio-Economic Structure of Surrounding Areas (Economics Dept., Andhra University, Waltair) Vol. I pp. 130-1.

**Ibid.

Major changes in occupational status, work force and participation rates of rehabilitated families

Sl. No.	Item	Differential indicator (%)			
		Before	After	Differential	
1. OCCUPATION DISTRIBUTION					
1.1	Cultivation & agriculture	76.97	3.40 (—)	73.57	
1.2	Non-agriculture labour	10.77	84.48	73.71	
1.3	Informal incl. trade	12.26	12.12 (—)	0.14	
2. WORKFORCE PARTICIPATION					
2.1	Workforce	57.22	57.22	0.33	
2.2	Participation rate	33.69	33.24 (—)	0.45	

Source : Report on Impact of VSP steel plant op. cit.

The study also reported 4 fisherman villages (namely Gangavaram, Chinapallipalem, Pedapallipalem and Jalaripallipalem) have been displaced leading to loss of employment (subsidiary occupation being agricultural operations) and shelter.

Dimensions of poverty :

In line with the estimation procedures adopted by the Planning Commission (Sixth Five Year Plan Document), the study revealed that a rehabilitated

household required a monthly per capita expenditure of Rs.90 to cross the threshold of poverty. It is found that about 62% of the rehabilitated households have fallen in the two lowest expenditure groups as against 31% found for the 'other' category of households as shown in Table. The incidence of poverty is relatively very high in the rehabilitated households when compared to that of 'other' households. About 62% of the former category of households are found to be poor in contrast to 31% of the latter category of households.*

Distribution of households and population below and above poverty line

Category	Percent of households		Percent of population	
	Rehabilitated	Others	Rehabilitated	Others
Below poverty line	62.06	31.11	66.76	34.24
Above poverty line	37.94	68.89	33.24	65.76
Over all	100.00	100.00	100.00	100.00

Ramana, K.V. and Krishna, K.S. op. cit., p. 267.

Job Opportunities Provided :

One of the pre-requisites of the rehabilitation is to provide jobs to the affected families. The study revealed that only one job was provided for every 30 rehabilitated households. The problem of lack of job opportunities was acute in view of the fact that the members of the affected families are not able to undertake jobs other than the agricultural and allied activities. However, steps are reported to have been taken by the public authorities to provide employment opportunities to these people. Considering the skills of these people, it would be worthwhile to consider rehabilitating them in farming, fisheries, dairying and poultry activities.**

*Ibid., pp. 264-4.

**Ibid., pp. 278-9.

• Study by ORG-EPD, op. cit.

Infrastructure :

The extent of gross inadequacy of infrastructure like water supply, drainage, solidwaste disposal, housing transport, etc., has been identified by the study* carried out for VUDA. The important considerations which emphasise the significance of investment in the Visakhapatnam metropolitan region, as per this study are:

1. The study has identified the gross inadequate of existing urban infrastructure both in Visakhapatnam city as well as smaller urban centres.

2. It was found that the rural areas in the region are suffering from extremely inadequate service levels which are both cause and consequence of depressed agricultural and other rural development activities.
3. More than doubling of economic base of the region both in terms of employment and population (population increasing from 14.05 lakhs to 31.85 lakhs and employment from 4.57 lakhs to 9.87 lakhs by 2001).
4. Need for more than proportionate increases in infrastructure development to keep pace with this expected scale of expansion of economic and demographic base of the region and more particularly high income generating and infrastructure intensive activities like manufacturing, wholesale trade etc.
5. Need for envisages disposal of economic base and the population (decreasing concentration in the Visakhapatnam city and increasing activities in Pedagantayada area, Pendurti-Kothavalasa, Anakapalle areas).

A total investment of Rs. 1060 crores has been suggested to take care of the infrastructure deficiencies both in terms of backlog and new investment by 2001. This investment is to be made in two phases - 1994-95 and 2001. Almost 75% of the investment is expected to be made by 1994-95 considering the enormous backlog in the infrastructure in the region. The largest investment is expected in the housing* field wherein both private and public efforts are required followed by water supply (purely public investment), industrial infrastructure (combined investment of public and private investment). The sum expected for improving environmental sanitation (solid waste disposal, stormwater drainage and sewerage) works out to Rs. 115 crores and a sum of Rs. 29 crores for recreation and ecological development. This includes, afforestation of hills both in northern and southern hill ranges, soil conservation, coastal erosion control, preservation of historical monument and special area conservation. The work on the ecological development is to be commenced immediately considering the present levels of industrial pollution in the region.

Policy Aspects :

Considering the magnitude of the problem, it is necessary to tackle the problem in the right perspective. Some of the measures to be taken up are:

1. Rural industrialisation :

Creating jobs in the rural areas particularly in the drought prone areas and providing the necessary social and economic infrastructure. Visakhapatnam, Vizianagaram and Srikakulam districts which are susceptible for drought should be provided with adequate small scale

and rural industrialisation to absorb the labour and ensure continuity in incomes. This reduces the migration to urban centres like Visakhapatnam city.

2. Urban basic services :

Providing urban basic services in small and medium towns can also restrict migration to the big cities. For instance, strengthening the social and economic infrastructure like schools, medical towns (Anakapalle, Bheemunipatnam) can reduce emigration to the VSP city. Development of Vizianagaram, Bheemunipatnam and Anakapalle in terms of their infrastructure in this connection are important to be considered. Necessary funding mechanisms to these towns and strengthening the capabilities of some of the municipalities would be helpful in reducing migration to Visakhapatnam city.

3. Upgradation of skills :

The literacy level of the Visakhapatnam district is one of the lowest in the State. Improvement in the literacy level, providing skills and upgrading the skills can make the manpower more productive and enable the people to increase their earnings.

4. Provision of credit :

Adequate flow of bank credit is a pre-requisite of the success of the enterprise. The needs of the informal sector have to be carefully assessed and adequate financial assistance be provided to them. In the context of Visakhapatnam city the extent and characteristics of this sector need to be assessed and suitable bank schemes be formulated.

5. Provision of space :

In view of the fact that the informal sector is going to exist and increasing in magnitude, proper planning in terms of providing space in the initial planning is important.

6. Rehabilitation of evacuees :

In view of the establishment of the steel plant considerable number of formalities have been displaced resulting in loss of shelter and income earning capacity to these families. It is likely that these families resort to informal sector as a livelihood adding to the already worsening informal sector in the city. It is therefore required to provide them alternative employment in the agricultural and allied activities besides providing some of the members vocational training so that they could be absorbed in steel plant itself.

* A sum of Rs. 964.98 lakhs for slum improvement is expected. Of this sum, as much as Rs. 715 lakhs is to be invested in VSP city itself. The rest of the sum is to be spent on slums in Vizianagaram, Anakapalle and Bheemunipatnam towns. In addition, a sum of Rs. 670 lakhs was suggested for rural housing.

SOCIAL IMPACT OF URBANISATION



TATA INSTITUTE OF SOCIAL SCIENCES

सत्यमेव जयते

BOMBAY-400 088.



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PREFACE

This report was entrusted to the Tata Institute of Social Sciences by the National Commission on Urbanization, Ministry of Urban Development, Government of India. The main objective of the report is to present an overview of the social dynamics and consequences of the urban situation in India. It has attempted to situate the urban question in the socio-economic-political context. It provides a social perspective on urbanization, the urban-rural differences and the implications for urban life; the major social institutions that impinge upon social life, that is, the family and the community, the dynamics in the urban community, urban tensions, social pathological manifestations that have recently become prominent in the urban context, viz., urban tensions, drug addiction, adult crime, juvenile delinquency and street children. The report has made a number of general and specific recommendations with respect to each of the above aspects of urbanization. No attempt has been made to make an exhaustive study of all the social problems arising out of urbanization in India, but observations are made on some major ones affecting social life.

Several methods were utilised in the preparation of the report. A survey of the literature, in the respective substantive area was undertaken as well as identification of secondary sources of information. An empirical sample survey was conducted on 93 drug addicts who were under treatment in the various de-addiction centres and hospitals located in the city of Bombay. This was done in order to elaborate upon the substantive aspects of the existing findings on the problems of drug abuse. Two sections of the report, the family and community dynamics, are based on the direct field experiences of the contributors. The section on street children drew heavily upon the action project on street children in Bombay conducted by Ms. Neela Shroff of the College of Social Work, affiliated to the University of Bombay. We thank her for sharing the materials. We also thank Mrs. Pratima P. Panwalkar, Chief, Community Development Cell, Maharashtra Housing and Area Development Authority, for her additions to the material on the community. We are also grateful to Mr. Gabriel A. Britto, Director, Addiction Research Project, Society for Promotion of Area Resource Centre (SPARC), Bombay, for giving us useful information on the problem of drug addiction.

The report is the result of team-work done jointly by social workers and social scientists of the Institute. This joint project brings out the basic social issues and the analytical perspective on urban life from both the disciplines and integrates them in a single framework.

I thank the collaborators of this report, Ms. Sriatha Batliwala, Ms. K.Y. Gandevia, Mr. K.D. Sikka and Dr. S. Parsuraman. Their contributions, as members of the team, is acknowledged with appreciation. Dr. (Ms.) Armaity S. Desai, who is also the Director of the Institute, has not only collaborated in coordinating the report and contributed to it, but also has taken upon herself the long and tiresome work of editing, compiling and scrutinising the draft. Without her relentless devotion and support, the report would not have been completed.

Critical comments by a number of persons associated with the National Commission on Urbanization have been of great help. Prof. Ashish Bose, Mr. M.N. Buch, Mr. Naresh Narad and Mr. Xerxes S. Desai have commented on the scope and substance of the report. In particular, I should mention the discussions with Mr. Xerxes S. Desai before the commencement of the final preparation of this report.

I need to acknowledge the help and influence of my colleagues in the Institute who have contributed one way or another to our work on this report, Prof. R.K. Hebsur, Prof. P.K. Muttagi, Prof. V.G. Panwalkar, Prof. S. Acharya, Dr. R. N. Sharma and Mrs. V. Nadkarni have painstakingly gone through the preliminary report and have given their valuable comments on it. In addition, Prof. Hebsur's extremely learned comments and his tremendous assistance in developing the chapter on 'Urban Tensions' were of immense help. Prof. P. Ramachandran, Prof. S. Chitnis, Prof. M. J. Apte, Mr. R.D. Naik, Mrs. S. Shekhar and Dr. S. Bharat have also provided many knowledgeable suggestions on various aspects of the report. My several other colleagues have also cooperated with the work in various ways, to whom I express my grateful acknowledgements.

I have also benefited enormously from discussions with a number of experts in the field : Prof. M. S. Gore, Prof. D. Narain, Prof. D. N. Dhanagare, Prof. Victor D. Souza, Prof. S.S. Jha, Prof. (Mrs.) V. Narain, Prof. T. K. Majumdar, Prof. A. Kundu, Prof. K.L. Sharma and Prof. D. Mohan. I wish to acknowledge my deep gratitude to all of them.

I also acknowledge the contribution of Ms. Mridula Bandyopadhyay, Ms. Chandrima Banerjee, Mr. M. Nandan, Ms. Vimala D'Souza, Mr. S. Dubey and Mr. Narendra Kumar, who worked as Research Assistants for the project. I also thank our students, K. Krishnamoorthy, Bolivia S. R. Mammen, L. San-kara, G. Parimoo, D. Lakshman, Utpal Kumar, R. Desai, S. Ramanath, Kalyan Ram, N. Maharana, D. Rajsekhar and A. Harceendran for their help in data collection in the survey on drug addicts in Bombay.

I also thank the numerous government officials, the Commissioners of Police, the Municipal Commissioners in several cities, and all the officials who have helped us in all possible ways.

I thank Mr. P. Balakrishnan, Mrs. Geeta Venkateswaran, Mr. G. Jayakumar and Ms. Sylvia Fernandes for their efficient handling of the typing work, of the various drafts of the report and to Mr. V Gimonkar for the typing of the final report. Thanks are also due to Mr. Mukund Sawant for drawing the relevant charts included in the report.

Finally, the Institute records its appreciation to the National Commission on Urbanization, Government of India, for sponsoring this report.

CHANDAN SENGUPTA

Coordinor



CHAPTER 1

URBANIZATION IN INDIA : A PERSPECTIVE

1.1 Though still predominantly rural, India has one of the largest urban populations anywhere in the world. India's population during the current decade has been estimated to be very close to the total urban population of the United States. While it now constitutes about 24 per cent, by the end of the VIIIth Plan it may rise to 33 per cent. It is not, however, the proportion to our total population but the sheer numbers, reported to have crossed fifteen and a half crores in 1981, that is of importance in urban growth and the consequential problems of social development of metropolitan centres, cities and towns in India.

1.2 However, to understand the context of urban growth in India, we have to situate urban development in the total context of development which has taken place in the four decades after independence. Planning in India has emphasised growth but not redistribution; heavy industry over agriculture in the initial crucial years; green revolution in a few pockets neglecting the large dry land farming areas; large irrigation schemes over small water conservation measures in rain-fed areas which run dry for several months in the year in spite of heavy rainfall in some parts of the year. Community development and panchayati raj were ushered in as the twin means of people's participation and decentralisation. The "percolation" theory which accompanied it, unfortunately, did not reach the fruits of development to the large masses of the poor. The process created greater economic polarisation in the village, as a result, the cornering of the gains of development by the more advantaged rural populations, mainly the upper castes

1.3. The growth of urban centres took place at the cost of rural development. Thus, the village became the supplier of the city's wealth but received little in return. Even the budget allocation for social services, like health, showed 80 per cent of the allocation to urban India.

1.4 The increasing emphasis in the seventies on the removal of poverty, and such measures as the Minimum Needs Programmes, were a clear recognition by the planners of the growth of poverty in the decades succeeding independence. It is, therefore, not a small wonder that cities in India swelled with the urban poor who came to urban centres as a result of the push from their rural homes, where there was a certainty of starvation and death, to at least the possibility of eking out a marginal subsistence in the large and burgeoning informal sector of the city. At least they could be assured of two meals a day even if other basic needs remained unmet.

1.5 The positive and the negative consequences of urbanization in India, described in this report, are, therefore, those of a society which has followed a wrong path of development. As suggested by a number of

scholars, there is no way in which the phenomenon of urbanization can be described in isolation from the process of development that generates inequality, deprivation and exploitation.

1.6 It is not urbanization *per se*, but the nature of urbanization, which reflects the inaccurate development model, that is of crucial significance in the context of urban problems of India. Under the impact of urbanization, the rural migrants in the cities may have become somewhat less poor, but they witness tremendous inequality. A city in India can no longer be considered as one single socio-spatial zone; even within a single city there are several zones having widely divergent and completely opposite patterns of living. The intra city diversity is marked, on the one hand, by the ostentatious display of concentrated wealth and luxury and, on the other hand, by the appalling misery and degradation of nearly a half of the city's population which migrates to slums and pavements where, today, we can find second and third generation city dwellers, to the extent that population increase has outstripped urban development and infrastructures.

1.7 Slums, and, for that matter, urban poverty in India, are not the products of urbanisation; they are the price for urban prosperity that represents the erroneous path of development followed in the country. This realisation is not something new, since many have already said it, but the repetition is imperative, because there is no sign of any redirection towards a better model of development even after four decades since colonialism in India has come to an end.

1.8. Firstly, in the name of development and the creation of growth centres, the cities in India were allowed to grow as unbridled parasites which drained the surpluses and the manpower resources from the surrounding rural regions without giving them an adequate return. This process of out-pacing the rural, in favour of urban and industrial development, became so severe in its impact on the overwhelming migration to a few cities that it forced the planners of India to finally accept the policy of rural development as the ultimate goal of Indian planning.

1.9 As a consequence of this, various developmental activities such as community development programme, land reform, and the cooperative institutions, were introduced in rural India in the first two decades of independence. Subsequently, when these measures were proved ineffective to either increase agricultural productivity or remove rural poverty, the ideology and the programme of 'green revolution' were accepted as the dominant orientation for rural development in India.

1.10 From the summary of various studies conducted on the 'green revolution', and other poverty alleviation measures adopted in the rural development strategy

in India, the actual results on social development have been negative. While productivity in agriculture has increased in some parts of rural India in recent years, it has led to the landlessness of small and marginal farmers whose lands have been taken over by the big farm owners. The increase in income has also led to acquiring consumer goods and addictive habits rather than investment in education, health or improvement in the status of women. In recent years, the exploitation of agricultural labour and the existence of bonded agricultural labour or brick kiln workers, is increasingly being highlighted. The earlier feudal caste structure and the polarization of wealth have been replaced by a new economic class structure in which those in advantaged positions, by education and wealth, improved their position. Expropriation of land of tribals has increased. There is a concentration of resources, inputs and the various facilities provided by the state in the small section of the rural rich who have cornered the gains of development. A large number of small and marginal farmers, and agriculture labourers, have become pauperized and landless, resulting in an increase in the "flight" or "distress" migration to cities.

1.11. Secondly, in the name of industrial progress the large scale industrial units were allowed to develop in a lop-sided manner in which most of the industries began to concentrate in a few cities or their metropolitan regions. Consequently, the larger cities tended to grow bigger and the nearby towns stagnated. For instance, when Bombay grew at an incredible speed during the past few decades, Dahanu, a nearby small town, remained stagnated during the same period.

1.12 The Third result of having selected the wrong path of development is related to the inability to expand the base of the formal sector of the urban economy so as to provide gainful employment to an ever increasing number of migrants—the victims of green revolution—oriented rural development and the neglected of the dry land areas where much of the agricultural population is concentrated (about 60 per cent). Unable to get secure employment in the organised sector of

the urban economy, the vast section of the urban poor are forced to resort to the most insecure, unprotected and unorganised employment in the urban informal sector.

1.13 The fundamental error in the development policy of India lies in the fact that the bias in the resource-allocation has never been directed against the exploitative mechanisms which make both the rural and the urban poor poorer and the rich richer. This is particularly evident from the series of failures which characterise the incorrect development model that exists in Indian society at present: failure to develop the remunerative process of production for the rural poor; failure of social legislation related to land distribution, minimum wage, equal wage; failure to develop water as a basic resource even at places which are reported to have higher rainfalls; failure to develop processing industries close to production centres; and a failure to check their concentration in big urban centres.

1.14 All these have resulted in an unbalanced growth of towns, initially by rapid increase in migration and, later, by natural growth. There is a continuation of the same exploitative mechanism in the urban sector with a few holding the resources and a majority outside it, hence, large groups are left out and some of them may then find escape into situations which express themselves in social pathology. Hence, the initial problem is a systematic one; it may find its expression in social pathology. The need for treatment therefore arises, not in the context of the individual, but in the context of the society itself. Hence, social change should involve structural changes in which re-distributive mechanisms are ensured with industrial/agricultural development and urban/rural growth. Unless we address ourselves to this key issue of redistributive justice, the question of development with social justice, does not arise. Urban development planners, therefore, will need to consider this key issue in understanding the process of urban growth and the concern with some of the social problems which arise in the wake of such development.

CHAPTER 2

URBANIZATION IN INDIA : NEED FOR A TOTAL VIEW

2.1 The history of the city, the urban system, has been the history of social transition. The founding fathers of sociology; e.g. Weber and Durkheim and also other social philosophers (e.g. Karl Marx), saw the city as a historically important subject of study in the context of transition from the stage of a lower social order, such as feudalism, to a qualitatively higher social order based on the division of labour and capitalist rationality. For them, urbanization was a necessary condition for the development of capitalist rationality in western Europe. It has also been argued by a number of scholars that urbanization is essentially progressive and, ultimately, liberative, and its impact can be compared to the development of capitalism as an improvement upon feudalism, because it is in capitalism that the self-realization of the working people, as a politically and economically organized class, had its fullest expression.

2.2 Although these observations are to be considered relevant for the analysis of the formative stage of development of western Europe, similar observations have been made in the context of the ancient cities of India. It was observed that Indian civilization was not primarily rural and some of the old cities of India did perform their "orthogenetic functions" of converting the folk culture into a civilized form (Chaudhury, 1962).

2.3 However, for the millions of the urban poor of India, cities represent neither history nor culture. Shocked by the ugliness and squalor that slums inflict on cities, Pandit Nehru once observed, "I believe in no argument, economic or other, which is based on the creation of slums"; Chaudhury, 1962 : 217. Yet, hundreds of thousands crowd into the slums of Indian cities, leaving their precious roots in village homes. "To condemn urbanization as an evil and warn people to keep out of cities is a cry in the wilderness" (Bose, 1976 : xviii). What is, then, the force that upholds this human spirit of living in an inhuman city ? It is often said that the character of a city is known by its slums, and not by its hotels and high-rise buildings. In the process of urbanization, is it necessary to experience a lag in such basic needs that there is less water, more filth, less homes, more shanties ? Even under these conditions, how does a city become relatively more dynamic than a village ? Urbanization is an agent of social change but the question is the direction of change and the quality of change it will unleash.

2.4 Answers to such questions lie in the total view of urbanization, a perspective which is almost absent in the existing state of the art on the subject. In India, the current spate of investigations, into the pathological urban conditions, is essentially dominated by a negative image of urban life. The total view of urbanization primarily rests on the objective assessment of both the

facilitative roles and the injurious aspects of urbanization in the context of the specific model of development being pursued by the state.

2.5 It must be made clear at the outset that the need for the development of a total perspective of urbanization is easier said than done. While, in projecting a holistic perspective of urbanization, glorification of either the positive, or denigration of the negative aspects, is to be avoided, it should not end up in producing a mere balance sheet view based on the profit and loss account of urbanization. In dealing with the various claims and denials of urbanization, a total view must address itself to the more basic issues of inequality, poverty, and survival, which urbanization throws up, and examine them in the wider context of the contradictions inherent in the chosen path of development if the specific socio-economic-political formation.

2.6 The urban environment is more integrating of differences than the rural environment but, at the same time, it is capable of bringing out more acutely the divisive forces based on deep-seated value differences and antagonisms, which easily get attached to the forces of change and the loosening of the rigidities earlier supported by rural structures. On the other hand, it is the contradictions in the urban situation which are accentuated and push for change to greater equity. Urbanization has been a powerful force to enhance art, education, science and technology, and evoke the resistance of subjugated groups such as the poor or women towards their emancipation. However, urban society has also been responsible for certain types of negative behaviours such as increase in certain types of crime, prostitution and various types of increased addictions.

2.7 In the Indian context, and so it is in the third world, also, urban growth has out-paced industrial growth resulting in a large informal sector. The effect of this factor has been to militate against the organisation of labour, continuing exploitation of the informal sector by the formal sector, resulting in the slowing down of the formal sector, and hence, the lack of a true urban culture and way of life.

2.8. Therefore, the questions we may ask are: urbanization is for whom and for what ? Who has benefited ? Is it taking place at the cost of the hinterland ? Are there forward and backward rural-urban linkages or is development polarised ? Is there a disparity within and between regions and has urbanization improved the quality of life ?

2.9 Max Weber has brought out the role of urban industrial development in the creation of wealth while Marx has shown that industrialization, by

bringing workers under one roof for exploiting labour to create capital, also led to the organisation of labour and a better deal for these exploited masses. However, due to the wrong choice of development models, the effects on India have not been to transform the feudal-agrarian society to an industrial capitalist or industrial-socialist one, society has largely remained a feudal-capitalist one, with the large masses of workers outside the industrial sector and a small advantaged capitalist minority, with its organised, formal sector, benefiting from it. New growth poles have been created, but those who have taken advantage are already skilled labour from urban agglomerations and not the local, unskilled population which has only received the 'crumbs from the table' of such development.

2.10 The result of such development has been that while urbanization and industrialisation have taken place modernization has occurred only in a segment of the population which may, at best, be 10 per cent of the total population of the country. There is a competition for scarce resources and, hence, it leaves out a large

proportion of people, thus generating tension and conflict. In spite of the fact that, the poor live cheek to jowl, where the rich -poor gaps are so visible, there has been no revolution worthy of change. In the later sections, we will explore the community dynamics that prevent the poor from organisation for change. Yet, it is the cities which have proved to be the cradles for yielding leadership, even agrarian leadership, and it is to them that we will have to look if social change has to be ushered into the still feudal-agrarian Indian social structure.

2.11 In the following sections, we explore these themes further—the urban quality of life, rural-urban differentials and their impact on the family, the socio-economic-political dynamics in the community, the existence of social tensions, and some problems of social pathology in the context of urban processes of development and change. Our focus is mainly on the poor and the disadvantaged, since they constitute the majority in this country towards whom our planning has to be directed.



CHAPTER 3

ANALYSIS OF THE POSITIVE IMPACT OF URBANIZATION IN INDIA

3.1 The positive impact of urbanization in India is comprehensible in terms of rural-urban differentials rather than the internal trait complex of a city. Current research on the various indicators of quality of urban life in India suggests that, physically, economically and, to a great extent, socially, the quality of urban life is better than rural life. The major findings from a study on the rural-urban differences of the physical quality of life indexes (PQLIs) are as follows :

The Physical Quality of Life Indexes (PQLIs) in the areas of infant mortality, life expectancy and literacy were found to be much higher in urban India in 1971. The PQLIs for urban India as a whole were on 23 points higher than the PQLIs for rural India.

Urban areas require more literacy and health service than rural areas merely to function. There are strong incentives, particularly in larger cities, for people to become literate even in informal ways. Schooling is probably more available in urban areas and has a lower opportunity cost if children are not easily employable.

Simple health services—with rather powerful effects on infant mortality and life expectancy appear to be more effective in urban areas just because greater population density makes possible significant economies of scale. This is particularly likely if these services tend to derive their methods of delivery from western style systems of health organisation. At the same time, demonstration effects or desire for higher living standards of change in the relative costs and benefits of additional children may reduce the average number of children delivered by a woman in an urban area compared with her rural sister—and thus reduce the risk that she will die in childbirth (Morris and Mcalpin, 1982 : 61).

3.2 That economic conditions of the urban people are much better, than those of the rural masses, is also well established. Although comparisons of rural and urban economic conditions in terms of income are problematic, since various adjustments for differences in the cost of living between the two are not easy to make, there is an overwhelming evidence to suggest that a great majority of the people in the Third World migrate to cities for economic reasons, such as employment and better economic and social prospects. Even though urban poverty is often understood as the extension or overflow of rural poverty, the findings of several surveys on rural-urban migration in India indicate that the gains of the migrants are much higher than those who have stayed back in their villages. In a survey of squatter settle-

ments in Delhi, it was found that a majority of the sampled households, who worked as casual labourers for only 240 to 260 days in the city, worked more than twice the working days they had in their villages. (Majumdar, 1978).

3.3 Urban poor are a labouring poor. The innumerable survival strategies adopted by the poor in a city, often showing considerable creativity and resourcefulness, are indicative of the innumerable ways and means of earning their livelihood. Reports of absolute starvation are much less in cities than in Indian villages for the poor migrant, a city in India may not provide him a decent standard of living, but it saves him from sheer starvation; between starvation and poor life style, the latter is the last priority on the poor man's list of needs.

3.4 A migrant's decision to move into a city is not guided merely by his subjective willingness to do so; objectively, the city absorbs the phenomenon of migration into its economic structure. The complex network of the urban informal sector, and its substantial contribution to the economy of the Third World cities, are the indicators of the objective acceptance of the urban poor by the city; it is through the employment in the informal sector, that the bulk of the urban poor eke out their livelihood in most Third World cities.

3.5 As far as the social benefits of urbanization are concerned, tangible measures of such benefits are difficult to work out. Barring education and health, which have been discussed earlier, there are a number of other factors which also constitute social benefits. It must be pointed out that an endeavour to search for factors of social benefits of urbanization should not be seen as contradictory to and inconsistent with the persistence of the rural cultural traits and identity in Indian cities. Perusal of a large number of surveys on Asian cities indicate that, apart from small section of the westernized elite, the difference between rural and urban ways of life is not clearly visible. It is with reference to this factor that the cities of India are often described as "overgrown villages". Yet, the findings of some studies on migration show that migration does reduce caste loyalties and the hold of leaders (Hebsur, 1979), leading to greater political individuation.

3.6 Indeed, in India, the lives of a great majority of the city dwellers and towns men have not acquired the characteristics of the true world of urbanism. Although India has one of the largest concentration of urban populations in the cities, the traits of urbanism such as, anonymity, rootlessness, heterogeneity, impersonal and formally prescribed relationships are virtually non-existent among the large number of urban residents. This may partly explain the reasons why deviant behaviour in Indian cities does not parallel the typical

western cities. The city tends to develop homogenous groups of migrants who hail from the same state and even the same village. They provide the social supports which cushion the rigours of the difficult circumstances of living. Crises are absorbed, much in the same way as in the village community. Borrowing and lending, at the times of adversity and plenty, are evened out in the process. When whole groups relocate, such as the kumbhars of Saurashtra in Dharavi, they bring with them the same caste punchayats and marriages are arranged among the group members. A number of migrants have come though information supplied by village migrant, or a relative, and the earlier period of stay thus facilitated, although, whole families migrating must, somehow, find their own means of survival from the day of their arrival.

3.7 Thus, the absence of a distinct urban mode of living in Indian cities may raise the fundamental issue as to what should constitute the social improvement of urban living upon rural life. It may be contended that the forces of change, that urbanization in India seemed to have unleashed in their wake, may be observed in the process of disintegration in rural bondedness. For, migration is not merely crossing the rural fence; it occurs in response to the disintegration of the rural economic life itself, thus preventing further integration into the rural system of production. Consequently, the process of marginalization and pauperization of the peasantry sets in. This would, to a great extent, falsify the dream of at least some migrants that, one day, when the conditions are improved, they would resort back to cultivation in their villages.

3.8 To understand the contrast of urban social structure from the rural, we may make a comparison here. As it is well known, the rural social order in India is essentially based on a semi-feudal pattern of life. Although capitalist farming has sufficiently weakened the feudal productive forces in Indian agriculture, the cultural syndrome of feudalism still persists in rural India. The cultural syndrome of feudalism is manifested in almost all the social institutions of rural society: caste, religion, family and marriage. Although the rise of

the peasantry, which culminated into various peasant movements and agrarian radicalism, made some impact on the rural masses, the prospects of this mobilization process, developing into a transformative movement, are blocked essentially by the structural dependence of the rural poor on the rural rich (Dhanagare, 1980). Nevertheless, a number of studies on the impact of mechanisation on agricultural labour suggest that the feudal type of production relations persist even in the areas where agricultural modernization has begun (Dhanagare, 1980). However, the changes that may be observed in some of the social institutions of rural India, are not real changes, because they do not affect the feudal structure as such. As for example, the changes in the caste structure, and its transformation into the competing groups, have not improved the level of class consciousness among the rural masses. On the contrary, these changes have resulted in fierce competition among the different castes belonging to the same, pauperized classes, thus preventing organised social action along class lines (Desai, 1981). On the whole, the victims of the rural social order seemed to have remained essentially the victims of a semi-feudal social order.

3.9 The socio-economic formation of urban India provides a somewhat, if not a totally different, picture. The persistence of rural characteristics in Indian cities may not allow for the possible internalisation of the values of urbanism by the migrants, but it is no more conducive to feudalism either, despite the fact that some parts of the urban mode of life in India may resemble the remnants of feudalism as they happen to exist in the pattern of work relationship in the urban informal sector.

3.10 This dichotomous mode of urban life in India may be attributed more to the distortions resulting from the very nature of the development process of the country than to the phenomenon of urbanisation *per se*. Paradoxically, this dichotomous mode of urban life in India, itself, may appear as a preventive against any possible breakdown in one of the basic social institutions of India, namely, the institution of the family.

CHAPTER 4

IMPACT OF URBANIZATION ON THE FAMILY

4.1 The character, strength and the composition of families in rapidly urbanizing areas of India have undergone some major changes. Very often, these changes are feared as potentially destructive to family organisation. However, in the Indian context, the fear appears to be more imaginary than real; it is more applicable to the western experience of the urban nuclear family. For, as we shall see, the families in urban India are certainly under stress, but have not actually disintegrated. Very often, we miss recognizing the fact that the families under stress and the families in disintegration are two different phenomena having separate sociological implications. As observed by a sociologist, "Every normal family goes through periods of stress in its life-cycle, whereas (happily), only a minority disintegrate" (Narain, 1975-81).

4.2 In the intense debate on the impact of urbanization on the family, the sociologists' primary concern has been with the effect of urbanization on the family-type. The sociological literature, on the impact of urbanization on the family in India, stresses the fact that, while urbanization has considerably influenced the problems of family life, the inner ethos of jointness has not been completely shattered under the influence of urbanization. This, however, does not mean that the rural type of joint family characterises the dominant mode of family life in Indian cities and towns. Given the high concentration of job opportunities in a few pockets of Indian cities, and, given the mounting problems of shelter, living under one roof is impossible for the members of an Indian family. However, it must be mentioned here that, even in rural India, jointness of living has not always been the case in the traditional sense of joint living except for the propertied class. The joint family system is largely a product of a larger social system based on agriculture, and other family based occupations. Occupational mobility, and possible occupational differences between the members of an urban family, are not conducive to a typical joint family. The evidence from isolated studies on the urban family in India, seems to indicate that the nuclear family is becoming the norm among all the classes of residents in metropolitan areas, in the surrounding towns and villages. Implicit in this nuclear type are the characteristics of a low generation depth and the narrow kinship range.

4.3 However, it is interesting to note that the incidence of nuclearity in the urban family in India is not inconsistent with the social fact of "jointness", because the phenomenon of nuclearity results mainly from residential separation. And, as observed by family sociologists, the joint family sentiment does not vanish with the residential separation, although the members of a family are not housed together. It is this psychological jointness that makes it possible for people to retain a reciprocity, especially to meet adversity, as also enhance the development of its members, e.g., a nephew coming to the city for furthering his education. However, it is not likely that such joint sentiments may affect the

independent decisions of an Indian nuclear family in its every day living, and the way in which it spends its income, because jointness is asserted mainly in major collective decisions in connection with various social events such as, birth, marriage, funerals, the performance of religious rites and any other matters which either involve expenses out of a joint fund, or, which concern the socio-cultural roots of the family.

4.4 Jointness being restricted to the major social functions involving more than one family, the urban nuclear family in India is to be viewed essentially as an independent economic unit. After all, the purse of each individual nuclear family is its own. This adds considerable flexibility to the use and (even misuse) of the family income for various purposes.

4.5 Urbanisation has not only caused economic independence of the nuclear family unit, it has also increased the scope of independent earnings by the female spouse of the family. As the demand for economic independence of the women is often equated with the rising status of women, it may be expected that, in the event of interpersonal conflict between the spouses of a nuclear family, the final outcome will be the legal separation, or divorce, giving rise to an increasing number of female headed families with the woman as the major earner.

4.6 While in India very little is known about the relationship between the urban nuclear family and the rate of divorce, studies on western families indicate that nuclear families influenced by urbanization, are significantly correlated with divorce. Family sociologists in the West have argued that divorce is inherent in the nuclear family itself; the fragility of the relationship is implicit in the intense bond between the couples of the nuclear family. The intensity of relationship essentially results from the pattern of marriage based on 'romantic love' which requires the integration of the whole personality of the individual spouse into the marital bond. Conjugal compatibility takes precedence. Hence, when conflict arises, the individual partners have no other binding force, aside from their children. Ultimately, the marriage breaks down when the emotional forces break down and but tressing social forces do not exist, as in the joint family, where the marriage is based on considerations either than individual compatibility of the couple.

4.7 In India, the impact of urbanisation on both the status of woman in the family, and the incidence of divorce, is much less, except in the case of a minority of upper class families of the big cities. Very often, we confuse the phenomenon of economic independence of women with their taking up jobs outside the home. It is true that in the urban areas of India, the number of working wives has increased considerably over the past few years, but at what cost, and to whose benefit?

Certainly, it is not for the benefit of the woman alone; she is required (or permitted) to take a job in order to meet the consumption needs of the family and not her own needs. Recently, there is a trend among the urban middle and lower middle class marriageable boys that they prefer a working woman to a non-working woman as their marital partners. The logic is simple; when both are earning, economic pressure is much less and brings in longer term returns than a dowry at a fixed point in time. We know that the dowry system is a part of the instrumental joint family where the full amount of dowry is fixed, and mostly demanded only once. The demand for the working wife for the sake of money, may be viewed as a new form of dowry — a recurring dowry, which is, in a way, worse than the dowry in the traditional sense. However, if the income gives the woman empowerment in the family, making her a more equal, if not an equal partner, it begins to change her status. Hence, it is not whether she earns or not, but the power she has on spending her income, which is crucial to her status. Though few studies exist, by and large, it is well known that a woman's earnings directly go into household expenditure while the man retains a part of his earnings for personal spending.

4.8 Urbanization in India has also created hardships for the working mothers, no different from those of rural working women. As marriages in both the rural and the urban areas of India are mostly arranged, mutual understanding between the couples of the nuclear household is almost absent. In such a situation, the working wife performs her double-duty at the market, as well as at home, she is sent to the market to fetch the extra income needed for the family, but is required at home to continue her usual role looking after the numerous household chores. Working women in the west are also reported to be doing household work, but the drudgery of such work is largely offset by the greater sharing of familial chores between men and women, and the higher level of freedom that western women enjoy, compared to even the highly modern Indian women.

4.9 With regard to divorce, urbanization does not seem to have induced such crises in the Indian family. An analysis of the census data, on marital status in India, reveals a number of unexpected findings. The proportion of divorce to the total family units in India has remained constant at less than 1 per cent level during the entire period between 1961 and 1981; the incidence of divorce/separation is much less in the urban families than in the rural families; while the rate of divorce in urban India has considerably decreased from 1961 to 1981, in rural areas it is slightly higher in 1981 than in 1971 (Fig. 1). However, the volume of divorced families has considerably increased in some of the metropolitan cities like Bombay, Calcutta and Madras in the current decade, but it has never crossed the 1 per cent proportion to the total family units of these cities. Surprisingly, in the rapidly urbanising cities like Bangalore the decrease in divorce has remained constant throughout the period between 1961 and 1981 (Fig. 2): the proportion of single-parent families is also much less in the urban, compared to the rural families in India; both in the rural and the urban families, the proportion of single-parent families has considerably decreased from 1961 to 1981 (Fig. 3); except for Calcutta the proportion of single-parent

families in other major cities shows a declining trend over three decades (Fig. 4).

However, it is not known to what extent these statistics reflect the true picture of the phenomenon of desertion and separation that exist in many urban and rural families, especially among the poor. It has been observed that in many families, urban and rural, the husbands are considered as the heads of the households even though they do not physically stay in the house or have actually deserted their families. This results in wrong enumeration. An empirical investigation is essential in order to know the actual situation of divorced/separated and the single-parent families in India.

4.10 The problem of the aged is yet another urban problem related to the urban nuclear family. It is generally argued that, in a typical nuclear family, there may not be any place for the aged. But, looking at the data reported in a household survey in Bombay, one finds that about 16 per cent of the extend families having narrow generation depth and being nuclear in character accommodate at least one aged person, either as the head of the family or as one of its members (Naik, 1987). This would indicate that in India the nuclearity of a family does not necessarily dis-house the aged. In fact, in most of the middle class families where both the spouses go out to work the aged persons are very much needed to perform various tasks, the most important being the care and supervision of the children, and in middle class houses, supervision of household help. However, when the aged become disabled, they pose a problem for working couples. In poor homes, they use valuable sleeping space. Most of the above facts seem to suggest that the urban family system in India has not yet degenerated itself into the bare frame of a nuclear family under the influence of urbanization.

4.11 Although urbanization in India does not seem to have made an adverse impact on some social aspects of family solidarity, it does have several serious consequences for the economic structure of the urban family which exists in a highly stratified social system. Sociologists have classified the urban family into four major social strata: the families of proprietary classes; the families of upper administrative and professional classes; the families belonging to middle or lower middle classes, and, lastly, families of the working classes. The strata themselves are indicative of how severe are the degrees and kinds of inequality that persist in different urban families in India.

4.12 As urbanization has virtually transformed the family as a production unit into the family as a consumption unit, it is quite natural that families belonging to the lower strata are the most affected in their efforts to meet their consumption needs, by selling their labour in the market. For, while the market provides them income in exchange for their labour, it does not provide other amenities that the most poor families need, but cannot afford, largely due to the marginalness of the income and the high cost of necessities such as housing. Thus, the control of the market forces, which regulate the supply of essential amenities such as shelter, education and health, is an essential pre-condition of the programmes for the removal of poverty.

4.13 Urbanization stimulates the growth of family income; it also stimulates the growth of expenditure.

But, does urbanization stimulate them in a manner in which the process can be equated with the theory of the "revolution of rising expectations"? An answer to this is not possible unless we understand who expects and what? The analysis of the N.S.S. data from 1951 onwards suggests that the proportion of the lower and middle expenditure class families, to the families of the total expenditure class in urban areas, has increased significantly during the last three decades; (Table 4.1).

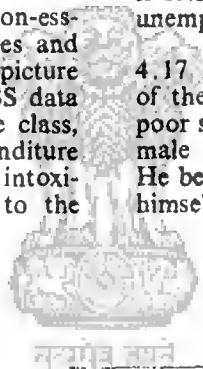
4.14 Very often, the poor urban households suffer from chronic indebtedness. The 1981 NSS data on urban indebtedness suggest that, although the urban households in the higher asset classes have a larger average debt, they bear a small debt burden because of the small debt-asset ratio, compared to the households in the lower assets classes. The NSS data on indebtedness in India further stress the fact that while among the rural households, the loans taken for the purpose of capital expenditure in farm business claim the highest percentage share of debt, the use of loans for non-productive purposes (household expenditure) is dominant in the urban households. Obviously, such non-productive use of loans may lead to perpetual misery, if the loans so taken are large and frequent.

4.15 There are certainly some distortions in the expenditure pattern of the urban families as a whole; a large number of urban households—the poor as well as the rich—spend part of their incomes on the non-essential, non-food items such as, consumer durables and numerous intoxicants. As far as the class-wise picture of the expenditure pattern is concerned, the NSS data seem to indicate that the lower the expenditure class, the higher is the proportion of consumption expenditure on the addictive items (pan, cigarette and other intoxicants). On the other hand, families belonging to the

higher expenditure class spend more on consumer durables.

4.16 According to the sociologists who have specialized in family studies, "a sudden upturn in economic and social status may constitute a crisis, quite as disruptive as that of economic loss or social disgrace. The price of upward mobility for some families may be family breakdown" (Hill, 1963 : 306-7). Although the NSS data on consumption expenditure show that there is a tendency among both the lower and the higher expenditure, classes of families to spend on the non-essential items, it is however, not known to what extent this contributes to the disorganization of a family. In our observation of low income families, in slums, and among poor households, the effects of addiction, especially alcohol, on the male member, are well known, resulting in the household being supported on the woman's earnings. They work in the informal sector as domestic help, vendor or piece-rate home based workers. These women carry the brunt of the family expenditure on essentials including food, clothing and house repair. But for them, the family would not survive. Not only do they carry out the productive tasks but also the reproductive and social tasks of the mother and wife. A high proportion of households are affected, although hard statistics are not available. The deleterious effects on children, and their survival in the educational system, can be well imagined. The cycle is often repeated as the male youth join the ranks of the unemployed and take to various addiction.

4.17 In urban India, consumerism is largely a problem of the rich and the upper class families, whereas, the poor spend more on intoxicants as the pattern is for the male to spend on himself rather than on the family. He believes that he has a right to spend as he consider himself as the "main" earner.



URBAN-RURAL DIFFERENTIALS—EFFECTS ON THE FAMILY AND WOMEN

Economic Survival

5.1 In the experience of some of us who have been working among the slum and pavement dwellers in the city of Bombay for years, the perspective on urbanization of the urban poor themselves is quite different from the prevailing beliefs on the subject.

5.2 First and foremost, urbanization, or rather, urban migration, spells survival for most poor families. It must be clearly understood that the entire nature of urban migration has undergone a subtle but radical transformation in the past two decades; the pattern of a male breadwinner migrating to the cities in search of work, while the rest of the family remains in the rural home, is gradually giving way. Today, entire families (usually nuclear units, but often extended families or whole kinship groups) are packing their meagre belongings and abandoning their rural homelands in search of work (and survival) in the cities. In several recent surveys in Bombay even middle-aged respondents reported having come to the city as toddlers or babes-in-arms with their parents, uncles, aunts and other relations.

5.3 This change is a sensitive though largely neglected index of the extent of rural pauperisation. It indicates that the older stereotype of the "money-order economy" has broken down at two ends. The urban migrant breadwinner, faced with increasingly high costs of living in the city (particularly the cost of shelter), and virtually no access to skilled, relatively better-paid and secure employment in factory-type jobs, can no longer send home enough to support the family. And the family left behind can no longer supplement the money-order and support life in the deteriorating rural agricultural economy particularly with the growing scarcity of fuel, fodder and water, which is the invariable situation in the deprived and backward regions of the country from which the most migration is taking place.

5.4 For most such families, especially the women, their rural life is not an idealic one of peace, tranquility and order, but of impossible odds: day-long treks for firewood, water, fodder; back-breaking work on drought relief or EGS sites (where they exist), and an almost perpetual state of hunger, unemployment and insecurity about the future.

5.5 Landless, jobless, dispossessed, they arrive in the cities with no welcome and no help (barring those, who already have relatives settled there). Certainly, they all undergo a period of insecurity and struggle in the urban area, particularly in their search for shelter, but this period is relatively brief for most. Before long, not only men but women folk find work in the rapidly expanding "informal sector" of the urban economy. According to recent studies, the urban poor in metropolitan areas like Bombay find it relatively 'easy' (if one is willing to work hard) to earn at least Rs. 10/- per person

per day—king's ransom by rural standards. Nearly half the poor households have more than one earning member—so that a family of four or five may have a monthly household income of between Rs. 600—1000/- (SPARC, 1985; Mobile Creches, 1987).

5.6 The urban poor themselves express this assurance of survival differently, and in terms which reflect more exactly their own reality and experience. In a survey of pavement dwellers conducted in 1985, the vast majority of respondents answered the question "why did you come to the city?" With one or the other of the following responses: "Kam ke liye" (for work), or "Pet Bharne Ke Liye" (To fill the stomach). Policy-makers should note the chilling indictment underlying these responses: all the poor want is work, not dole; they seek survival, not the "bright lights", or "the streets paved with gold," that the city allegedly represents to the rural poor in the view of the urban middle-class. In conversations with countless slum dwellers, another expression keeps recurring as the essence of urban life: 'Do Waqt Ki Roti'—(Two meals a day). And this, in fact, is what urbanization means for the poor in today's economic context: "Two meals a day" is an excellent prophylactic for survival.

Social Integration and Urbanization

5.7 In the above section, some of the major economic forces which make urban migration a necessity for survival have been outlined. However, these are not the only factors responsible for the flight of the poor from rural areas, or from smaller towns to metropolitan regions. As surveys have shown, caste and communal conflicts, widowhood/separation/abandonment/bigamy intra-familial quarrels, escape from indebtedness, and a host of other individual causes, can also lead to the rural exodus. And the inverse side of this—viz., the relative personal freedom, the breakdown of rigid caste, communal and other social hierarchies, and the greater social mobility of urban life—are all a very positive aspect of urban reality for the poor, as they are for the rich.

5.8 Countless examples illustrate this. In one pavement slum in Bombay, there live a group of families belonging to the "Wagri" caste from Gujarat. In their native district, they were part of the upper-caste group. But due to various economic changes (particularly the fragmentation of land holdings), they became landless and impoverished by the late 1960's. Being of a high caste, they were forbidden by their cohorts from working as landless agricultural labour or artisans—the only occupations available in the area. Indebted and jobless, they were forced to flee—not to neighbouring Ahmedabad, where their caste may have become known—but to Bombay. Within months, they entered the wholesale garlic business which guaranteed survival, even though they were forced to occupy pavements as the only affordable shelter.

5.9 As one of the wagri elders put it, "Here you can survive, even if you have to live on the street. Nobody cares what caste or community you belong to, or what work you do. Everybody is too busy with their own survival. In the village, we had all the dignity and respect of our caste, but our own caste people were willing to let us starve to preserve the caste status. What status can you have on an empty belly? I would rather sweep the streets in Bombay than go back".

5.10 Similarly, many backward-caste migrants from UP, Bihar and Madhya Pradesh have gone to cities like Calcutta, Bombay and Delhi escaping, not so much from poverty, but from incessant attacks from dominant groups on their person and property --- particularly after attempts to organise and overthrow exploitation. Even though they submit to another kind of exploitation as unorganised labourers in the city, they feel they are not, and cannot be, singled out for persecution in the urban melting pot because of their caste.

5.11 Along the same lines, considerable numbers of minority group families have gone to large cities to escape communal conflicts and strife in their rural or small-town homes. In a census of pavement dwellers, mentioned earlier, "communal riots" were the leading cause of migration mentioned by a significant number of Muslim families --- particularly from Hyderabad, and areas in Gujarat and Uttar Pradesh.

5.12 For many families, therefore, urbanization means not only economic survival, but social survival; it means relief from the bitter oppression which persists to this day - the ransacking/burning of Harijan 'wadas,' the rape of Dalit women, and a host of other atrocities in more parts of the country than is officially admitted.

5.13 The anonymity of the teeming urban slums offers two forms of security to these "social refugees" : either their caste/communal identity loses significance altogether, or, they gain the strength of large numbers of their fellows, thus losing the vulnerability they once experienced thanks to the accident of their birth. One of India's leading sociologists, M.S. Gore, has documented and analysed these social advantages of urbanization in his book on urbanization and the family.

5.14 This is not to say that sectarian or religious loyalties are completely broken down. If anything, communal and caste riots have become an appallingly regular feature in cities like Ahmedabad, Baroda, Delhi, and even Bombay. But at the family level, for the very poorest, it has not as yet become a powerful disincentive to urban life---and the rural alternative is still largely viewed as worse. Also, this is a relatively recent phenomenon and its macro-impact on family migration behaviour will have to be studied carefully. Some of us hypothesise, however that the consistent economic advantages of urbanization will outweigh, for the poor, the occasional risk of communal violence for a long time to come.

Women in the Family of the Poor

5.15 The general impression that urbanization has had several negative, if not disastrous, effects on the family life of the poor, and on women in particular, cannot be denied. Although there is little hard-core

statistical evidence, we are aware that tendencies to alcoholism, gambling, and domestic violence all seem to be aggravated in urban areas. This is partly attributed to the crowding, lack of proper shelter, tension, wider range of temptations, and greater access to cash income which are all characteristics of the city. Wherever cash incomes have increased in rural areas, a similar phenomenon of alcoholism has correspondingly increased. The impact of all these factors on women is undoubtedly severe.

5.16 In a poor urban household, it is not uncommon for the male wage-earner to spend a greater part of his wages on liquor or gambling, giving his wife a pittance for household essentials. In such cases, the woman is forced to find work (usually as a domestic help, or a home-based piece-rate worker, or petty vendor), and daily survival increasingly depends on her earnings rather than those of the husband. In these households, almost all expenditure incurred on food, fuel, lighting, water, and medical care --- and even annual expenditure on clothing and house repair --- is met through women's incomes which are the only "stable" or "regular" income for the family.

5.17 The incidence of wife-beating and child abuse, desertion, bigamy, and other problems directly affecting women, is also quite high, though, once again, in the absence of hard statistical evidence, we are forced to rely on micro-level (and possibly subjective) information. Women's organisations are certainly increasingly concerned about the wretched plight of poor urban women, so many of whom seem to lead a nightmarish existence. They rise as early as 3.30 or 4.00 a.m. to stand in water queues; cook morning meals for the family; begin wage-work by 7 or 7.30 a.m., return at noon, attend to feeding the children and other household chores; resume their after-noon rounds of wage-work around 3.30 --- 4.00 p.m.; return home around 6.30 --- 7.00 p.m. to begin the evening meal and house-work and child-care. At the end of this arduous day, in which rest or an hour's leisure is rare, they bear the beatings or abuse of drunken husbands for the slightest, or even imagined, infractions. These women exist on barely 4 to 5 hours sleep a day, no decent latrine, insufficient food, insufficient water, and cramped, noisome shelters, unacceptable by any standards of human habitation.

5.18 The problems of abandonment, destitution and bigamy result in the high proportion of woman-headed households in urban areas. Women in such situations are also extremely vulnerable to sexual harassment and insecurity as they are not seen to be under the "protection" of any man. Some women in these circumstances enter into bigamous or common law marriages with another man (often living out the same cycle of drunkenness, abuse, beatings, once again), or are forced into prostitution for survival. In a survey of a slum in Bombay to study the single parent households, it was found that out of a total population of 2,379 households studied, 148 (4 per cent) were found to be single parent families and 8 others had spouses who were absent for temporary periods because they stayed in the village seasonally, or were in another city/country. A majority of them were headed by women and widowhood was largely the cause, fewer being deserted or divorced (Bharat, 1986).

Besides the fact that many of these women become main earners after becoming single parents, and a lowered economic status, they also suffered from depressions, especially when death was the cause. They all suffered from poor or disturbed sleep. They also felt fed up with their lives and tended to cry easily (both stemming from depression). There was considerable anxiety regarding the future of the children—education and marriage (Bharat, 1986).

In a few of such single parent families, reduced income resulted in problems of maintaining the child in school. The psychological reaction was that the child missed the parent. In 3 cases, boys in early adolescence had developed truancy, drug addiction and addiction to movies. (Bharat, 1986).

5.19 The impact of this kind of existence is equally severe on children. They are subject not only to the greater health hazards of their unhygienic living conditions, but to many social and economic hazards. Although most children in slums are enrolled in local municipal schools, the vast majority drop out by the Vth standard. The dropout among boys is greater than among girls as the street is more attractive than the school and, with both parents at work, no one is at home to see that the child learns from school which is on the shift system. The timings of school do not coincide with the working hours of the parents. After class VII, the girls are usually withdrawn to assist their mothers with domestic chores and the care of younger siblings; or to participate in the family trade such as vending. Boys may be withdrawn to begin wage-work, assist in the family occupation, or learn a trade as an apprentice. Most find that, beyond class VII, they cannot find admission in the private secondary schools since a majority of Municipal schools terminate at that stage.

5.20. Mothers have no time, amidst their drudgery to supervise children—fathers, of course, do not see it as their role to do so. Children have no space for play or recreation. In a study of parents of children in Municipal schools, the majority of the mothers wanted a playground for their children among several choices they were offered. Older boys, especially, begin hanging around local gambling or liquor dens and some even begin earning small sums as 'gofers' to local bootleggers and drug peddlers. The more fortunate ones are put to work or apprenticed in their early adolescence, and thus become regular wage-earners. Several, who continue school, supplement family income through delivering milk and newspapers, escorting children of more advantaged homes to school, and delivering meals or vendor in the market in the evenings. It is significant that many poor families see employment as the best way of getting boys off the streets and out of trouble or "bad habits". About 25 per cent of all those who enter class I continue to high school, of whom, a greater proportion are boys. Usually they survive the system because their families can "afford" the education as, even where fees are not charged, it costs to send the child to school, or, they can forego the wages they could potentially earn—or because this need is deferred on the basis that a boy who matriculates may gain access to better-paid, more secure, white-collar occupations. A substantial number, however, fail in the school finals.

5.21. The girl's story is somewhat different. They are not viewed as carrying the future economic welfare of the family in their hands, since they will marry and go into other households. Although there is some evidence (in cities like Bombay, Madras and Calcutta) that this is changing, the overwhelming majority of the urban poor are obsessed with keeping girls out of harm's way until they are "safely" married off. And because parents view the social environment of slums and working class areas as extremely unsafe for growing girls, there is a continuing tendency to early marriage.

5.22 All the above features certainly seem to bear out the commonly-held stereotype of the "evils" of urbanization. It is, therefore, essential to examine here two important countervailing points regarding urbanization and the family: (1) There is ample evidence to show that the so-called "breakdown" of family structure and negative impact on women and children is also occurring in rural areas, if in different forms, and (2) For all the seeming evils of life in a poor urban household, there are distinct social and psychological advantages which go with them, and which are not equally available in rural areas.

The Rural Scenario

5.23 As we have seen earlier, the adverse situation for families—breakdown of social control mechanisms, behavioural norms, alcoholism, gambling, and domestic violence, are generally considered as distinctly urban maladies. So also, greater hardships, brutalisation and unhealthy living environments. However, a growing body of information indicates that rural life (as the apotheosis of urbanization) is not necessarily safer or healthier for families.

5.24 Studies by women's groups in green revolution belts, for instance, found that the incidence of alcoholism, drug-addiction, wife-beating and rape was very high in these areas and the local women had complained bitterly about these problems to the researchers. In a women's programme in drought-prone rural Rajasthan, too, desertion, bigamy, wife-beating, drunkenness and rape are issues that local women repeatedly raise at meetings. Studies of the functioning of the Employment Guarantee Scheme, in rural areas, highlight the exploitation of women: in Maharashtra, researchers found that more than 75 per cent of the labourers on these sites were women (Gupte, 1987; Datar, 1986). Furthermore, it was found that, on the official register, over 50 per cent were men's names, but these men sent their wives to work in their place while they remained at home. In the majority of such cases, the women were forced to hand over their cash earnings to the menfolk.

5.25 In addition, the rural women's lot, vis-a-vis water, fuel and fodder collection has already been outlined and does not bear repetition. Further, data showing that upto 1/3rd of rural households are female-headed (and not entirely due to male migration, either) seems to cast in doubt the whole thesis that urbanization has a deleterious effect on families and particularly on women.

5.26 While voices are raised in righteous indignation over the unhygienic and unhealthy conditions in urban slums, it is useful to remember that virtually every

health indicator for rural areas shows a higher incidence : death rates, maternal mortality rates, age-specific deaths, infant-mortality rates, which are all far higher in rural areas compared to the urban. Because of relatively less dependence on cash incomes, nutrition rates have tended to be better in rural India, but this, in itself, is changing rapidly with the spread of cash-crop cultivation and overall commercialisation of agriculture, as also less land available per head in the household. Cases are known of the reverse process of food flow, from urban to rural, as there is greater availability and regularity of grains through the public distribution system and food parcels are made and sent from the city to the village in periods of adversity.

5.27 Another widespread myth is that the fabric of family is stronger in rural areas. While this may have been true in the past, the self-same economic forces which are resulting in rural impoverishment, on the one hand, and commercialisation of rural production on the other, are gradually breaking down this fabric. The very fact that so many people who flee to the cities do so because of internecine quarrels over land and other assets is a clear indication of this. Slum-dwellers, and particularly women, have told tales of being thrown out, dispossessed or robbed of their share of inheritance by brothers, brothers-in-law, father-in-law and even sons. Destituted by their own "family" members, they come to the cities in search of survival. This does not seem to speak well for the health of family life in rural areas.

5.28 On the other hand, survival outside the familial fold, is almost impossible in rural areas. If deserted or cast out by husband or in-laws in the village, women and their dependent children have fewer survival options in a village mainly depending on wage labour, which is not available round the year. Hence, their living is pitiful. Even in those rare cases where a woman has the courage or awareness to seek justice from authorities, the male dominated panchayats and local courts generally rule in favour of the man.

5.29 The relative isolation from exposure to potentially progressive forces is another disadvantage of rural life. This affects families, and especially women, in several ways. Because the conservative or reactionary social control mechanisms are so much stronger in rural areas, the access of women and girls to education, training, new ideas and practices, is much more limited. Many of these are potentially very beneficial to family life.

5.30 Take the case of family planning, for example. The lower birth rates in urban areas are not an accident, by any means. They are a reflection, not only of greater awareness of, access to, and utilisation of information and facilities, but greater individual freedom to exercise choice. In a city, a woman can, with virtual anonymity, seek to terminate an unwanted pregnancy, practice internal contraception, or undergo sterilization, *even against her husband's or in-laws' wishes*, if she so desires. The same would be almost impossible in a village. What is more, a city-dwelling woman has much greater chances of obtaining reasonably accurate information not only about birth control, but of the services available for it, than her rural sister. This enhanced control over their bodies and reproductive system is highly beneficial, not only to the women themselves, but to the long-term welfare of their families.

5.31 Few rural women are as fortunate, being much more subject to custom, tradition, and familial dictates. If anything, in the case of the present example, they are constant targets of local family planning drives and are often pressurised into accepting sterilisation without adequate information, or the assurance of after-care follow-up, or treatment of complications. Either way, the question of individual freedom of choice does not arise for these women.

5.32 This is not the only example of the restrictions in access to information, freedom of choice, or the utilisation of public service in rural areas which have a negative rather than a positive effect on family welfare. Similar illustrations can be found in such areas as education, health care, nutrition, child development, water and sanitation, employment and training, and housing schemes. In many parts of the country, caste and communal structures debar entire families from availing of even the limited services being made available in rural areas. In rural Gujarat, for instance, Harijan or Muslim children are not admitted to local anganwadis of the Integrated Child Development Scheme (ICDS) if the latter are located in caste-Hindu dominated villages. This is in spite of the fact that those services are meant for the most disadvantaged. Families of certain communities are routinely neglected by paramedical staff and health workers in many regions of the country. In a similar vein, people of some sections have great difficulty in availing of the myriad development schemes offered by the government for the welfare of all, because these schemes are implemented by the local administrative machinery which, in turn, is controlled by the traditional power groups of the area. All these dynamics ultimately affect the quality of rural family life adversely, if only they are acknowledged as doing so.

5.33 Therefore, one is hard put to it to imagine how rural life can be considered so very beneficial to family life and why urbanization is deemed an invariably unhealthy and destructive force. We have seen that "ruralization," if one may so term it, is not necessarily the ideal of the poor and downtrodden—and also that urbanization has its own costs and negative effects. However, any objective analysis must lead one to conclude that urbanization, *by its very nature*, has undeniable positive, and progressive aspects which cannot be ignored. These aspects are particularly advantageous to the poor.

5.34 Firstly, the larger metropolis virtually guarantees survival because it guarantees employment, however marginal, for those who are willing to do manual labour and utilise their creative resources. Unemployment is a critical problem only for those who seek white-collar or formal sector blue-collar jobs. But for those willing to sort garbage, recycle paper, metal, plastic and other scrap, sweep streets, carry loads, vend petty commodities, clean people's homes, supply milk, wash cars, mend pots and pans or work in a myriad other poorly-paid but regular jobs, there is no dearth of work. And since most poor families have more than one wage-earner, the household economy—which is the fundamental basis for a family's welfare and survival—is, in general, stable, if not strong. Incomes in those families can range from Rs. 600 to Rs. 1,000.

5.35 This economic self-sufficiency generates many interlinked, but largely unrecognised changes in familial relations and stereotypes. The wage-earning capacity of hitherto dependent family members—particularly women and other children—subtly alters the rigid age and gender hierarchies which characterise rural families. Through the strength of their economic contribution to family survival, these members participate to a greater degree in major and minor decision-making and the seeds of familial egalitarianism are thus sown.

5.36 The tremendous variety of the urban economy also provides access to a greater range of opportunities and skills. This, in turn, gives the poor far more occupational mobility, permitting them to interchange jobs seasonally, or over time, creating “mixes” which help them optimise the fruits of their labour. Thus, those who began life as construction workers on a building site may, a few years later, be found to be selling fish, doing carpentry, or vending cheap plastic goods.

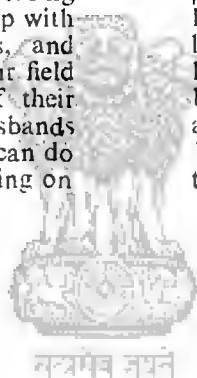
5.37 This economic environment creates a number of options for women. Studies have indicated that the percentage of woman-headed households in the poorest strata of urban areas may be even higher than the national average (SPARC, 1985). While most of these may be so due to the force of circumstances, (desertion or death of spouse, bigamy, and so on) an increasing number are the result of women refusing to put up with exploitative and oppressive family situations, and opting to survive on their own. According to our field experience scores of women have been forced out of their homes, or themselves, left drunken and violent husbands and started out afresh with their children. They can do this only in urban areas where they know surviving on

their own is economically feasible. This is not to suggest that this trend is the norm or the rule. In fact, for many poor urban women as also those from higher income groups, not only put up with intolerable relationships, but end up supporting the entire family through their own earnings. Hence, these become single parent families even when husbands continue to share the shelter for they do little more than use the home to meet their personal needs and batter their wives in the process.

5.38 Poor urban women are thus increasingly becoming aware of their rights and alternatives, backed by the knowledge of their economic self-sufficiency. Some may argue that this is far from healthy for the survival of the family and, in fact encourages its breakdown. However if the ‘health’ of the family is based on the exploitation and oppression of some of its members (as is the case of women in millions of Indian households) then it is hardly an institution worth preserving in its present form. And if urbanisation is giving women the alternative to seek new ways of living with dignity, self worth and equality, then it is certainly a trend for the better.

5.39 To sum up we will quote Salma, a Bombay slum dweller :

Here everything is different and everything is possible. We live worse than dogs but eat like kings). I earn my own money, so, my husband and in-laws have to treat me with respect. We don't have much, but we have more than we ever had before. In the village, we were always hungry, always frightened. But the city has taught us courage. You have to be tough to survive here—you learn to fight for yourself, for your rights.



COMMUNITY DYNAMICS IN URBAN LOW INCOME COLONIES

6.1 Except for a minority of the upper class, who live in flats and place a high value on privacy and individual living, a majority of urban dwellers live cheek to jowl in congested slum communities or pavements or, at best, in large chawls. Living as they do, in barely 10×10 space most family chores are performed within the sight of others—whether cooking, washing, or even bathing. All this results in a sense of interdependence, reciprocity and a high degree of communication within the immediate community in which the family resides. There is very little that neighbours do not know about the family. Professional social workers, on visits to families in low income colonies, have often had, not only a curious gathering of onlookers, but a number of neighbours who help the family to give the necessary information or to articulate the problems.

In the absence of cash reserves and capital, it is this network of relationships or social capital that is the mainstay of the families of the urban poor and features very prominently in the coping mechanisms of families in crisis. Lack of space, economic hardships and the changing norms of self, have resulted in the break-up of the joint family even in urban low income families. However, some studies and our observations, in chawls and slums, depict the manifestations of the joint family characteristics in the immediate neighbourhood which is very critical towards the development of self and community identity.

Degree of Homogeneity

City living has also been characterised by a high degree of homogeneity with respect to the major parameters of class, religion, language, and even specific regional locations such as a district. For example, immigrants from Ahmednagar or Ratnagiri districts in Maharashtra find their way to their own village groups. Thus the sense of anomie and isolation, characteristic of western urban life, is less so in the Indian urban environment. There is a sense of continuing identity of the self. Village culture and ethos continue in such living and traditionality is reinforced. Thus, impact of urbanization is cushioned and rendered less traumatic; change takes place at a slower pace, over two or three generations.

The degree of social homogeneity, and the duration of a slum settlement and the life which has ultimately evolved, in such areas, inevitably, will reflect the various characteristics of the settlement. Thus, social homogeneity of the area, economic stability achieved by individual families over a period of time the establishment and stabilisation of local community organizations, the development of acceptable patterns of organization such as interaction between sub-sets of the community and an established hierarchy of relationships, would naturally vary. In older communities, mobility is very low, except for a marginal section of the residents.

The slum-political/bureaucratic nexus is often well defined and some turmoil may be witnessed only in situations where internal and/or external motivated factors attempt to change the above set pattern. Any change, from within or without, which threatens the vested interest, is reacted to swiftly by them. Communities which are of shorter duration, with lesser stability, would naturally reflect a different set of responses to the various factors operating upon them.

This obvious fact of differential characteristics of settlements, within a time-frame, needs to be mentioned as there is a dangerous tendency in urban planning to present a stereotyped urban slum-dweller, ratified by legal statute such as a cut-off date for recognising a slum, when, in reality their differences call for differential specific interventions by the governmental and the non-governmental sectors. Thus newly settled communities have families who are preoccupied by the need to earn a living and have only tentative relationships with neighbours and patterns of interaction are yet to emerge. In older communities, where economic stability is established affordable housing begins to assume priority in the hierarchy of needs. Because of linkages with their neighbours, and an established system of interaction, cooperativisation of housing also becomes more feasible.

Social Life

6.2 It is observed that a distinct social life is also created within its parameters. Since a majority—may be 70 per cent—live in lower economic colonies, we will describe its specific features. Youth clubs and gymnasias spring up in neighbourhoods where young men especially gravitate to expend their youthful energies. Social clubs also exist in these communities. The major function of some of these organisations is to collect funds for the periodic celebration of various religious festivals. They remain quiescent in between such periods, though recently, these clubs have begun organising video-film screenings as another means of collecting funds. Over the years, some of them, through political party influence, have become groups claiming to represent the cause of the slum dwellers. The seeds of local "committees" are found in such grass-roots attempts at organisation.

Political Linkages

6.3 Political parties are ubiquitous in most urban lower-income communities, and tend to nurture and develop youth organisations affiliated to them. The result has been that these parties, to ensure their own following, divide the poor and keep them from uniting to espouse a common cause. If, today the poor in large urban agglomerations remain powerless, it can be largely attributed to the divisive situation created by

loyalty to a number of conflicting political groups. Since urban slums are vote banks, the political grip is tremendous and the people fear their local leaders who are known to be closely linked to politicians. Each political group has its own henchmen in the slum who extort money and generally use muscle power to command a following.

6.4 On the one hand, political manipulations and on the other, bureaucratic inability to provide an alternative in the given context, is most starkly witnessed in the issue of the "cut-off-date" to "recognise" a slum for receiving services and for alternative accommodation in the case of removal. The issue is both philosophical and moral and draws its strength from the Constitution—the right to life. On the other hand, the response is generally in the harsh realities of bureaucratic wisdom and directives to decide the date that would bestow recognition of a right to a slum community. Political influences are brought to bear on the bureaucratic decision and one sees political horse-trading with the date being pushed forward from time to time. It succeeds in dividing the slum dwellers, even in the same slum community, into the "haves" (fall within the date) and "have-nots", (do not fall within the date) and prevents them from uniting so that they become victims of the system. Often, the most concerned groups are seen expending their energies on the issue of the cut-off date, and the basic issues of availability of land, finances and positive state-intervention for low-income settlements, remain untouched. Hence, the slum should be considered for development on an "as is where is" basis, using other characteristics, for determining the appropriate nature of intervention.

Slums and Urban Development

6.5 The most dismal aspect of urban life for the poor is thus the lack of adequate shelter and a safe and hygiene living environment. The psychological costs of such conditions are said to be enormous, though no one has attempted to measure them. Most of those who are opposed to urbanization are against it on this one main point. Crowded, dark, poorly ventilated hovels in congested slums and shanty towns, cause the better-off city dweller to shudder and demand their removal. The prospect of further in-migration and greater congestion creates panic reactions and demands for extreme measures like issuing 'passports' and physically stopping migrants from entering the city. But few, if any, recognise the fact that slums are *not the inevitable result of urbanisation—they are the inevitable result of resisting and even process of urbanization at the policy level.*

6.6 Slums develop because we do not accept and plan for in-migration in urban development exercises. If the requisite infrastructure was provided at affordable rates, the poor would be able to live in safer, healthier habitats. This was precisely what was done in the 1920's and 30's to attract rural labour for the burgeoning textile industry of Bombay. Today, however any such measures are ruled out on the grounds that they would attract even greater numbers to the cities.

In the urban context, the slum and its inhabitant have become the favourite whipping-post for the collective guilt of the middle-class community and, not surprisingly so, the elite among the slum dwellers

themselves. Notwithstanding the liberal and convincing interpretations of the morphology of slum settlements, the acknowledgement of the abysmal poverty which drives the poor to urban areas, and the inadequacy of shelter they find in urban areas, it is not unusual to find a total volte-face when the urban elite, and even intelligentsia, are faced with the situation in its reality. The attitudes to the slum dwellers then surface which show contradictions in our expectations of the slum dwellers. Thus, for instance it is the slum dweller who is expected to maintain the same standards of hygiene and sanitation as the middle and upper class, even though there is no water or any facility worth the name. If the slum is to be organised into a co-operative society, then it becomes the specific responsibility of the slum-dweller to uphold all the moral and administrative tenets of cooperativisation, even though we are aware of the irregularities in cooperatives of middle and upper income housing.

6.7 In the absence of any official support or policy, therefore, families create their own shelter, however substandard. The ruthless dynamics of the land and housing market, in most cities, also force them to live in the highest possible density—all of which result in the slum which are the eyesores of the elite and the privileged.

6.8 The slum dwellers are also required to carry a special burden to safeguard the physical standards of planning and construction in the city and the redevelopment plans, when large builders can get away with major violations. The poor must show commitment to repayment, for paltry sums provided, for the receipt of which the physical and procedural travails are well known, when large sums of public money are misspent or diverted into illegal channels in the building trade. Even the little which is planned is half-hearted, sporadic and piece-meal and often illogical attempts are made at eradication and resettlement which, inevitably, give rise to conflict and become counter-productive. There is an inadequate perception of the slum and its population, because it must also reflect the norms of the larger society, and be in consonance with it, including the deviations and lack of adherence to norms one finds in the larger society. Yet, the slum dweller is treated with a separate moral measuring stick from the rest of society.

6.9 The lack of environmental hygiene and health hazards are usually the result of corrupt lower-level bureaucracy whose conservancy staff demand money from the poor residents to remove their garbage or to clean the community latrines and the open drains. The result is the creation of conditions which need not exist, despite high population densities, but for the power structure in which the poor are mere pawns. Collecting such 'haftas' in the colonies of the rich is unknown, but is, in fact, the rule rather than the exception, in the colonies of the poor. This explains the insanitary condition found in the slums.

The Politics of Shelter

6.10 It is known that 50 to 60 per cent in large cities live on pavements and in slums and at least another

one-fifth in one-room tenements such as 'chawls' which are termed as 'first class' slums. Hence, the majority make-do under severely limiting conditions. It is a legal shelter which is the basic problem. Shelter *per se* people can provide for themselves, and do so in the slums, improving upon them as time goes by. But the issue of a legal shelter is connected with the powerlessness which this silent majority faces in the city. Their existence is almost as though on sufferance, and the threat of eviction looms constantly before them. Political influence sees to it that slums remain as slums. Besides being the vote banks, they also provide money to those who collect 'rent' as the landlords of these shanty colonies; but these 'landlords' have occupied the land illegally in the first place and make many times the investment on the poor shelters they build or on no shelter at all but the pitch they provide. The result is that in all the slums and pavements, vested interests exist to maintain them in the way in which they have been established so that they continue to yield ill-gotten revenue. These same elements also oppose the occasional attempts of residents at co-operativisation of housing, as this would result in direct loss to them. Vested interests have opposed even the families getting their own water connections as those who own taps lose the income from selling water. Hence, an existing Municipal scheme in Bombay can not reach families willing to come together to share a water facility.

6.11 When a political party exists as the only one, the area often benefits; but, in more instances than otherwise, multiple party affiliations make it difficult even to bring about environmental improvement which, on an innocent examination, appears to be a non-controversial issue to bring everyone together. For instance, an old slum in the city was without latrines and the people generally used the nearby beach and other areas in the vicinity. Since the Mayor of the city was from the same ward, he sanctioned latrines to the youth group which approached him. This sent waves of alarm in the opposition party which saw to it, by threats of physical assault, that no latrines were built lest the party in power, represented by the Mayor, won more electoral popularity because of this sanction. Hence, while the opposition party was busy protecting its political future, the people had to make-do without latrines.

6.12 The political realities at the community level, on the one hand, and the issues of urban planning, which have left more than 50 per cent out of the minimum need for shelter and a safe environment, have created an untenable situation for the urban poor. As land values continue to rise, not only the local bodies, but also the builders, are creating conditions of fear to remove slum dwellers from their colonies. Religion, language state of origin, political affiliation, giving amenities, including photo passes to some and not to others, have all been the means to keep the poor disunited so that the power of their numbers has not enabled them to secure material gains for themselves. Hence, they continue to be pushed further and further, to the periphery of the cities, creating labour-job imbalances in the urban employment market. Property values and short term gains have taken precedence over the principle of develop-

ment of mixed-income housing, established and accepted worldwide, which allows each group to support the other in the economic sector.

6.13 Conversely, areas which were on the fringes of the city at an earlier period, consisting largely of inhospitable terrain, such as marshy lands and dangerous hill slopes, were used by the low income settlers who, with their own labour, "develop and prepare" the land, at great physical and monetary expense. However over the years, the boundaries of the city are further pushed out and these early slum settlements find themselves enveloped by the city. With growing affluence and sky-rocketing land prices, they become "eye-sores" to be pushed out further.

6.14 This repeated phenomenon, witnessed in all the major urban centres, is a stark testimony to the failure of urban planning, on the one hand, and the object failure of the bureaucracy to implement its own plans as it gets caught in the imbroglio of administrative apathy, and inability shown even in the simple exercise of protecting the vacant lands belonging to the State. Dharavi, the slums on the Western Expressway, and the erstwhile Janata Colony in Bombay, are examples of the above problems.

Role of the Poor in the Urban Economic and Social Structure

6.15 It is the slum and pavement dweller who provides today the vast network of services that the middle and upper classes enjoy at cheap rates. These services include the entire food supply network (vegetables, milk, eggs, butter, bread, meat, poultry as well as restaurant services), clothing, laundry, vending and sales, transport, conservancy, communication, construction, and domestic services for homes, offices, and factories (such as cleaning and canteen staff). The slum and pavement dwellers, if united, have the power to bring to a halt the entire urban system, so powerful is their role in the urban economy. Yet, as seen above, the political and social force which operate, at both the micro and macro levels, will retain the slum—if not in the line of vision of the privileged. The force of the state and their own powerlessness result in large slum-removal programmes which push the poor out of sight, to new locations. Whatever organisations of slum dwellers have come up in the last decade, have emerged with an increasing realisation that, in fact, in their numbers there is strength. Yet, their power to wrest their rights still remains limited as the poor are not united. Divisive forces used by the non-poor, see to that.

6.16 Urbanisation, and the process of living and working in the city environment and understanding it, is beginning to create a greater awareness of their rights among the urban poor. They begin to see themselves as citizens contributing to the urban economy and, therefore, deserving their own place in the sun. It is no small wonder then that virtually every slum has its own "Committee" or local organisation. Many of these, in turn, have banded together into city-level or national affiliations such as the 'National Slum Dwellers' Federation, which has been actively prosecuting for land, housing schemes, basic amenities, and better health and education services. This growing political awareness

the determination to actively seek a better life, to understand political processes and increasingly participate in them, are all part of urbanisation too. And these forces are born in those self-same slums which are said to breed violence, crime and every sort of anti-social activity.

6.17 One cannot separate the family from the larger community, since they are interlinked. What affects the one affects the other: changes at one level impact at other levels—though often in different forms. For example, violence-bred poverty and frustration may manifest in riots at the mass level, and in beatings or physical abuse within the family. Similarly, the growing awareness of civic rights at the group level may be reflected in greater individual freedom within households. Both the processes of social change and violence, bred from poverty (which itself is a violence perpetrated on innocent people) are simultaneously at work.

6.18 The very socio-economic-political dynamics which operate to create and maintain slums, also use them for carrying on activities which are illegal before the law. Bootlegging, for example, and shelter for criminal activities, are provided by the vested interests in these slums and, ultimately, the poor bear the burden not only of a noxious and polluted physical environment but one which socially endangers the lives of their children, youth and adults, both men and women. The elite see slums as cess pools for breeding crime, whereas, it is not because the poor are criminal but because they have no power to prevent such elements from using the slum to shelter their nefarious activities.

Implications for Urban Policy and Planning

6.19 Unless urban planners see slum dwellers as equal citizens, with a right to life, the question of alternatives to the current social problem of the city will not be addressed in its appropriate perspective. For instance, to depopulate a city, we are well aware that it is the immigration of the elite classes which must stop. It is they who should be removed to the new towns and peripheries of cities because it is they who generate the jobs which the poor service. Thus, the poor follow the rich. Yet our policies address the problem the wrong way around because the poor are more expendable than

the elite to which class the urban planners and policy makers, in fact, themselves belong.

6.20 The human and material costs of eviction of slums have never been analysed. The cost in state machinery required to carry out the operation is often nullified. As shown by a study of pavement dwellers, a majority return within a short period of time because it is impossible to police such areas, and economic imperatives push them back to their old locations. The cost to the families of the slum dwellers is not only physical, but in all areas of their lives. The psychological costs are never measured. A method adopted is to evict midday when men are not likely to be around. Hence, the women and children bear the full brunt. In one case, a woman who was due to deliver, was so shocked by the moving down of the huts by the bulldozers, that she delivered her baby in the midst of the mayhem. Children were in the middle of their school examinations. They came back to find their home in ruins. Even the movement of a slum community is not timed with the children's school year. Yet, a government officer arranges his transfer to coincide with his children's academic year. No one has studied the consequences on children of such periodic upheavals and their view of the violence they must deal with so early in their young lives.

6.21 Unless we are willing to face the socio-economic-political dynamics that create and maintain slums, the problem of shelter, which is the second major problem of the poor after food, will not be solved. In the process, slums will continue to attract and shelter the very elements the city fears—the illicit brewers of alcohol, drug traffickers and criminal elements. While the facilitative role, or the positive impact of urbanization, especially on the urban poor, has been brought out in the earlier section on the dimension of urban-rural differentials, the negative image of urban life emerges out of the internal dynamics created by the very process of urbanization. While we cannot undertake an exposition of the entire range of these problems, in the next section, we will discuss the key areas of social pathology that have, recently come into prominence in the urban context viz., social tensions, drug addiction, crime and delinquency and the problem of street children.

CHAPTER 7

URBAN TENSIONS

7. Urbanization and Urban Turmoil

7.1 Although the law and order machinery is generally more effective in Indian cities, compared to the rural areas, the situation of peace and security in many cities has been deteriorating. This is due largely to the emergence of various ethnic and non-ethnic urban tensions and conflicts. The ethnic tensions are primarily related to linguistic-regional conflicts, religious-communal strifes, and intercaste rivalries, whereas, the non-ethnic types of urban tensions include all kinds of disturbances arising out of the demands and rivalries of workers' organizations, student unrest, election violence and so on. Urbanization in India has thus given rise to various tensions and conflicts.

7.2 Ideally speaking, the process of modernization, and the consequent secularization, should dissolve ethnic identities and cleavages. One would expect to find non-ethnic tensions and conflicts which cut across ethnic divisions. Such non-ethnic tensions are typically urban, and are precipitated by accelerated urbanization. But it has been well established by the scholars of modernisation in developing plural societies that the process modernization, of which urbanization is an important and integral part, sharpen and aggravate ethnic tensions and conflicts. India and the Indian cities are no exception to this.

7.3 Unfortunately, both the ethnic as well as non-ethnic tensions are found to occur simultaneously in most Indian cities and towns. However, the forms and character of these tensions have been different in various cities; they also erupt at different times. In some cases, the ethnic and the non-ethnic conflicts may run parallel to each other and reinforce each other. There are reasons to believe that the endemic strife in the cities of Gujarat is due to the fact that the anger (arising out of economic factors such as inflation,) of the Gujarat urban middle classes, frequently turns communal. Two types of ethnic disturbances may occur at the same time (e.g. disturbances related to Dalit Panther Movement and Shiv Sena agitation in Bombay have often occurred at the same time). Lack of data on ethnic conflicts does not allow us to know what happens to intra-ethnic conflict in the event of a conflict between two ethnic groups.

7.4. While disturbances related to the non-ethnic urban tensions arising out of inflation, labour management conflicts, inter-union rivalries, student unrests and political violence, have been very common in almost all the Indian cities and towns, the ethnic tensions and conflicts in some cities have been increasing and have often taken a severe turn. The incidents in Ahmedabad, Baroda, Bhiwandi, Malegaon, Bombay, Delhi, Meerut and Muradabad, would almost outweigh the political and trade union related violence that have occurred in the recent past in Calcutta and other cities.

7.5 It is not surprising that non-ethnic tensions occur more in cities and towns than in rural settings because industries, headquarters of organisations, educational institutions and the entire network of the public distribution system, are all concentrated more in cities than in the village. However, this spatial concentration of the above institutions and establishments itself does not induce urban violence or disorder; it is only when these institutions fail to satisfy the rising needs and expectations of the more vocal and aggressive sections of the urban people, that the tensions begin to rise. Urbanization and violence may be curvilinearly related. It has been found that, in the initial stages of urbanization in India, political violence seems to decline and then rise with a further growth of urbanization (Hebsur, 1974).

7.6 Barring its violent character, the non-ethnic urban conflict does not seem to jeopardise the structure of urban life as such. On the contrary, a silent procession, a peaceful demonstration and a disciplined strike, bear the testimony to a democratic society, and also indicate a higher level of consciousness among the people. Moreover, disturbances related to the non-ethnic issues are mostly contingent and are likely to subside through effective negotiations.

7.7 One of the principal reasons for the potential growth of ethnic violence in urban areas is that the process of urban migration alters over the years the ethnic composition of the cities. In almost all the regions of India, the religious minority, the higher castes and the people drawn from the region other than those to which the particular city belongs, are over-represented in the urban areas in general and in the cities in particular (D'Souza 1986). This kind of permanent alteration in the composition of the population, and ethnic arithmetic, adversely affect the political power of some groups. But this changing arithmetic is also a reflection of a new kind of opportunity structure and a new kind of distribution of gains of modernization which favour some ethnic groups and militate against other groups. An explosive situation thus arises.

7.8 Regarding the fast spreading menace of communal riots in the urban areas of the country, it has been argued by the experts that in urban areas, while the manifestations of the problems are communal in nature, the causes are largely secular, in that, these communal tensions largely represent the conflict between two economic interest groups (D' Souza 1982). In such cases, the mobilisation of the followers (who have often nothing to gain from such interests) becomes easier to the extent that the leaders, representing the interest groups, are able to exploit the sentiments of the participant community which often gets disturbed by a new value system brought in by urbanization.

7.9. However it is to be noted that, as such, the urban system in India has not been very inimical to the maintenance of the individual identity of a community. The innate sense of unity in diversity has largely remained intact throughout Indian history. It is only when the values which, embedded in a community, are subjected to perverted use and exploitation by the vested interests, that the sentiments of a community are disturbed. The feeling of deprivation, along communal lines, is further accentuated when the members of the community are in reality deprived of the necessary social and economic needs.

7.10 Recently, some of the major Indian cities have become the springboards of various regional conflicts. The urban character of social tension, arising out of this conflict, is largely attributable to the nature of urban development itself. The concentration of the large scale industrial operations in a few big cities has resulted in the creation of a high ethnic division of labour in these cities. As a consequence, these few cities have become the settlements of highly heterogeneous groups. It is important to note that, among the various components of ethnic diversity, the ethnic division of labour mainly concerns itself with the language based ethnic heterogeneity.

7.11 In our investigation, Bombay and Bangalore seem to be the most heterogeneous cities of India. Besides Bombay, Bangalore and other Indian cities also have some degree of heterogeneity in terms of one or two components of ethnic characteristics. For example, cities like Hyderabad, Ahmedabad, Lucknow can be considered partly heterogeneous in terms of the religious compositions of their population, whereas, Bombay and Bangalore are the most heterogeneous in terms of language as the most influential component of ethnic characteristic. Madras is the least heterogeneous in terms of all the components of ethnic identity (Tables 7.1 and 7.2).

7.12. The analysis of ethnic heterogeneity or homogeneity in Indian cities requires answers to the following unavoidable questions : What has made Bombay and Bangalore more heterogeneous and Madras more homogenous than the other Indian cities ? What are the sociological implications of a city being heterogeneous or homogenous ? Does heterogeneity lead to social tension ?

7.13 Here again, the same dichotomous nature of our urbanization can be held responsible for making one Indian city more heterogeneous or homogenous than the other. During the current decade, Bangalore has grown very rapidly surpassing the growth rate of all other metropolitan cities. Bombay's population of course, shows the opposite trend by exhibiting a decline during the same period. However, Bombay is a case of a saturated city. Age-wise, the city is much older and has a longer urban history than Bangalore. The gigantic population size of Bombay has already made itself burst to its seams. Nevertheless, the city of Bombay exposes some of the structurally contradictory characteristics of India's urbanization; glitter and wealth, side by side with poverty and squalour.

7.14. Bombay is known as the commercial capital of India. It is one of the major industrial centres,

of Asia. Bangalore has also recently undergone the major phase of industrial 'leap frogging' that has led to the rapid growth of the city's population. In this context it is not unusual that these two Indian cities, having a greater concentration of a large industrial network, will produce a high degree of ethnic-division of labour. For, large-scale industrialization demands different types of labour with different skills which are normally provided by the migrants who come with different skills. Such skills are not necessarily available in the resident population of the state where these large industries are located. As a result, the city, where these large industrial networks are situated is likely to turn into a 'no man's land' indicating the height of heterogeneity among its population. A city, being heterogeneous, should not have any problem as such. In fact heterogeneity is a healthy sign of a cosmopolitan culture which lends support to national integration. The problem arises when the people of the state to which the city belongs, do not have a reasonable share in the economic opportunities of the city. Bombay experienced it earlier, Bangalore will not be behind, given the heterogeneous character of the city, as well as the increasing rate of migration from rural and urban Karnataka to Bangalore city.

7.15. In the recent years, we have been witnessing the phenomenon of delegitimization of the major political institutions. Political parties have lost their ethos and integrative capability; bureaucracies have become corrupt; trade unions are characterized by mere economism. The decay of major secular national political parties has particularly encouraged the various kinds of tensions we have been discussing. This decay has left the field free to communal parties to exploit the real or imaginary urban grievances and frustrations.

The urban Poor and Urban Tensions

7.16 It is often believed that the intra-city disparity in living conditions in terms of housing and other economic necessities, breeds urban violence and tension (Kundu, 1985). The "demonstration effect" of extreme consumerism and ostentatious living of the few on the poorer segments of urban classes, causes considerable anger among the poor. "Exposure to higher living style of the privileged increases the sense of absolute as well as relative deprivation among the urban under-privileged classes. The communication media and influential political and social ideologies tend to aggravate the sense of injustice" (CSDS, n. d.). It is also often assumed that the preponderance of tensions and disorders in urban areas of developing countries may result from the problems of adjustment and acculturation faced by the migrants (Hoselitz, 1966). As a result, the migrants are fired by all sorts of traumatic experiences which finally result in violence and tensions (Tangri, 1962; Pye, 1966).

7.17 However, a large number of studies on the social and political correlates of urban migration in India suggest that the migrants, in general, and the urban poor, in particular, are neither participants nor beneficiaries of most of the urban strifes and tensions (Hebsur 1979; Gore and Yesudian, 1981). Most of the urban poor in India are too poor to become actors in the arena of urban tension. In fact, poverty binds different poor communities together for various kinds of security.

Nevertheless, the urban poor often become the victims of communal riots. Their primordial loyalties are often exploited by the vested interests for political gains in which case the poor may appear as participants of these riots. Even if they do not participate, "living as they do with the least physical protection and practising their trades on the open roadside they are among the first casualties in such riots" (Gore and Yesudian, 1981 : 270).

7.18. This is, however, not to suggest that the demonstration effect of the urban disparity has no impact on the urban poor. Usually, the impact does not

automatically turn into organized social action, but, rather culminates in types of behaviour termed as deviant. In many cases, the tension-prone protests and demonstrations are led by the upwardly mobile urban residents who often exploit the poor for the purpose of mobilization to unleash their frustrations. But this does not negate the possibility that the poor will never be demanding. If poverty and exploitation among them are allowed to fester for long, the urban poor can also become active participants of urban tensions. It is the women and children who bear the worst brunt of urban riots.



CHAPTER 8

DRUG ADDICTION

8.1 One of the negative images of city-culture, that has come of age in India, is the fast growing abuse of drugs. Although the abuse of several dependence-producing drugs has been a feature of Indian society and culture since ancient times, the need for prevention and control of drug abuse is of recent origin with its widespread use by the young, especially in urban centres. Between the decades of the 1970s and 1980s, the drug scene in India has undergone some major changes as it has become a world-wide phenomenon. The abuse has spread very fast among the urban youth. Earlier, drugs such as, opium, bhang and charas, have been replaced, to a great extent, by alien drugs like L.S.D. and Brown Sugar. Alcohol is increasingly being accepted as a beverage in the elite sections in India. Drug peddling has almost become a parallel economic activity in most Indian cities. Illicit sale and purchase of drugs in the cities has been developed into a very intricate marketing system with all its ramifications of the underworld criminal activities.

8.2 Until the early 1980s, the psychotropic drugs, such as brown sugar and other derivatives of heroin, played a very minor role in the spread of addiction in our cities. The findings of several studies on drug abuse in India, during the 1970s, highlight the following facts :

1. The proportion of abusers to the total sample was small.
2. Alcohol, opium and cannabis were the main drugs abused.
3. The proportion of regular users was very small.
4. The prevalence of drug abuse was significantly more among males than among females.
5. The abuse was more common among the students belonging to the affluent upper strata families (Ministry of Health and Family Welfare, 1977).

8.3 The drug addiction syndrome during the 1980s has virtually transcended its earlier boundaries in several respects. The information collected for the purpose of the present report brings out the following significant changes related to the present scenario of drug addiction :

1. It is the psychotropic drugs, especially the synthetic adulterated form of the heroin which has swept the addiction scene in major cities in India (Table 8.1).
2. The abuse of these drugs can no longer be considered as a disease of affluence; it has percolated right down to the poorest strata of the cities.
3. Among the poor, most of the addicts work in the informal sectors of the cities; the rest are largely unemployed.

4. While the abuse of drugs, other than brown sugar, may be attributed to the popular urban stereotypes, such as frustration, stress and value conflict, there is no apparent reason why addicts have changed to brown sugar except for its cheap price and its prevalence as a fashion drug.
5. Adulteration of brown sugar has made this particular drug relatively cheaper, the marketing of such cheap adulterated quality of brown sugar has also become easier so as to reach the poorer sections of the city.

Extent of the Problem

8.4 The prevalence rate of drug abuse in some of the major Indian cities—excluding the socially accepted drugs—during the 1970s, has been reported to be in the range of 4 to 10 per cent in the sample population covered by different studies (Ministry of Health and Family Welfare, 1977 : 17). However, the proportion of the addicts in the total population of a city is not known. The recent information on the magnitude of the problem is largely based on a rough estimation (sometimes a mere guess or impression) made by several agencies, individuals and also by the police. If the reported estimate is correct, it is said that there are about 80,000 to 1 lakh drug addicts each in Bombay and Delhi, 50,000 in Calcutta and about 40,000 in Pune city. Of the total population, these figures may be insignificant, but their share in the total population of the specific age-group (assuming 15 to 25 years as the most vulnerable age-group), is very significant : 7 to 8 per cent in Bombay and Delhi, 14 per cent in Pune, and 5 per cent in Calcutta (Table 8.2).

8.5 The new trend of brown sugar seems to have become more wide-spread than the earlier trend—the rich, the poor and the middle class, male and female, adults and children, and even a number of doctors, have become the victims of this new pattern of drug abuse.

Drug Addiction and the Urban Poor

8.6 The labouring poor have neither the time nor money—the two essential prerequisites for drug addiction. Yet, drug abuse has percolated to the urban poor. Part of the clue of this puzzle lies in the process of the “percolation effect” itself; in India, it was not the urban poor, but the affluent youth of the city who took the lead in the spread of the abuse. However, this was not the case with the phenomenon of drug addiction in the west where it started with those marginal sections of the city's population who lived in the congested slum colonies.

8.7 It is difficult to know what proportion to the total addicts in a city come from the poor category, because almost all the studies, conducted on the addicts in a city, are based on samples selected either from rehabilitation centres or other institutions to which the poor generally have less access. Nonetheless, since the urban poor constitute the bulk of the population of a city, it is likely that their proportion to the total addicts would also be very large.

Casual Factors

8.8 The findings of the existing studies on the prevalence of drug abuse, among the urban poor in India, indicate that the main causes of their involvement in the abuse of drugs, especially brown sugar, are peer group pressures, unemployment and dissatisfaction arising out of their employment in the informal sector. In the study conducted in connection with the present report, the addicts from poverty groups gave no evidence of any psychological reasons for the abuse of drugs. To them, their involvement in the abuse has resulted mainly from the economic problem of job-related frustration; frequent retrenchment from one job and taking up another; low wage; insecure job conditions and so on. Among the unemployed poor, it was their aimlessness—no job, less education as the opportunity in the successive levels of education, after SSC, is extremely limited, and no motivation for any social or political activities.

8.9 Many of the respondents in the present study reported that peer-group pressures forced them to take to brown sugar. These findings are largely consistent with that of other studies which also indicate the strong influence of the peer group on the new entrants in the addiction process. Although, in our sample, peddling seemed to have nothing to do with the involvement of the poor in the addiction to brown sugar, a number of experts in the field informed us that peddling did provide the entry-point for addiction among the unemployed urban poor. The tendency to emulate the culture of the rich, epitomized by the drug culture of the youth from the richer classes, has been reported to be the main cause of the involvement of the urban poor in the abuse of drugs in a particular city. During the course of our investigation into the drug problems in Calcutta, a number of persons involved in the anti-drug campaign in Calcutta, have spoken about such a tendency among most of the addicts from the poverty groups in Calcutta city. Thus, unemployment, job-related deprivation, peer-group pressures and the imitation of the rich culture of the city, are some of the main causes for the prevalence of drug addiction among the urban poor in India.

8.10 As far as the addicts from the well to do and the middle classes, the reasons reported in various studies seemed to be largely psychological in nature : satisfaction of curiosity; fun or kicks; coping with frustration about the existing value system, failure in love affairs and relief from family pressures. Some of these reasons are similar to those found in that part of our sample survey which dealt with the addicts from the non-advantaged groups. "Increased affluence and large dependence on parents is also a major cause" according to Marfatia, a former psychiatrist of note in Bombay who

is no more, and wrote, a decade and a half ago. Marfatia noted that, in Bombay, "Being affluent they have no other outlet and a minor role to play in society. There is no incentive to work; there is no incentive to earn there is no incentive to go out and face the world because they have been living in over-sheltered and over-protected environment. So, these people become drifters and they swell the ranks of chronically unemployed people who take to drugs and become addicts". (Marfatia, 1972 : 9).

8.11 A large number of middle class urban families in India are under various stresses and strains. Very often, the social and economic pressures that these families have, are transmitted to their young adult members. Having failed to cope with the pressures, these young boys and girls develop various forms of frustration resulting in addiction to drugs. To quote an ex-addict himself :

When I was small . . . we had a very funny notion . . . that all the bright went in for Science and not so bright for Arts and Commerce . . . (what) Added to this kind of notion was the job opportunities at that time . . . So without proper counselling and without proper vocational guidance, I went to St. Xavier's College, Bombay, and enrolled as a Science student. Now right from the first day I knew that Science was not my cup of tea, that I just could not cope with Science. But just people not to see through that image . . . I continued in the first year and . . . managed to pass and everybody said 'you barely passed First Year Science'. Suddenly one day it dawned on me, where is all the future ? Where is all the image ? The whole image that was built up over the years suddenly came crashing to the ground, and all I could think at that time was to escape . . . (Pinto, 1986 : 31-32).

Drug Abuse and Criminality

8.12 It is true that the articulative power of a city in matters of crime, delinquency and drug addiction is no more than that of a village or small town. But, there is also a close inter-relationship among the various types of deviance in a city. Drug addiction and crime are closely inter-related. Usually, it is not the addiction *per se* which leads to criminality, but other factors, such as the need for money to procure drugs in the absence of any other legitimate means, which may lead to various crimes such as theft, burglary, pimping, cheating and so on.

8.13 When asked about the sources of money for the drugs, a large number of addicts in our study reported that they had to resort to theft and, quite often, they stole various goods from their own households including their 'wives' and 'mothers' ornaments. Theft by drug-users is said to account for something like 70 per cent of larcenies committed in New York city, and it is estimated that everyday, approximately, a million dollars' worth of property is stolen to buy drugs (Willis, 1974).

8.14 The issues analysed above are those related to the demand side of the problem of drug addiction. The supply side of the problem is more serious and calls for

greater attention in matters of prevention and control of drug abuse. The huge quantity of heroin unearthed in recent years indicates how dominant is the supply factor related to drug addiction. Between 1983 and 1986, the seizure of heroin in India is reported to have increased over 29 times : from 139 kg. in 1983 to 703 kg. in 1986 (*Sunday*, 11—17 January, 1987). The city-wise breakdown of the seizure is not available in any systematic order. Regardless of the place of supply, it is the city that provides the maximum demand for a bulk of the drugs. There runs almost a parallel economy in drug business. According to the estimate of SPARC, the annual local consumption value of brown sugar in Bombay alone could be, approximately, between Rs. 179 and Rs. 300 crores.

8.15 The social implications of such a solid base of the drug business, especially in Brown sugar, would be that drug peddling would continue to be a substitute for employment as long as there is no scope for employment in other sectors of the economy of the cities. Moreover, the current debate and discussion on the international network of trafficking in drugs, its link with the terrorists and other activities related to destabilization of the country, are suggestive of the fact that a major chunk of finance, required to keep those activities alive, comes from the sale of drugs. In this context, drug peddling, not drug addiction, appears to be the subject matter of grave concern to everyone.

Future Scenario

8.16 It is difficult to project the future scenario of the problem of drug abuse in India in the absence of authentic data. The reported prediction on the extent of the problem suggests that, given the present trends, there would be 15 million drug abusers in the country at the turn of this century (*Sunday*, 11—17 January, 1987 : 12). However, during the course of our discussions with the

experts currently engaged in the study of the problem, it was observed that the prevalence of brown sugar had some self-limiting factors inherent in the drug itself : to augment the market, it has to be cheaper and, in order to be cheaper, it has to be more adulterated (the pure heroin is costlier and, the more adulterated it is, the less kicks it offers. Some addicts are reported to have resorted back to the usual drug other than brown sugar, since it no longer gives them any 'nasha' (kicks). Thus, like a fast changing fashion in the city, brown sugars addiction is also likely to fade soon; and, its fadedness may further be accelerated if there is intensive and sustained effort to control peddling. In fact, it is not brown sugar addiction, but the peddling of this drug, which is likely to cause a menace in urban life.

8.17 This is not to suggest that there is nothing to panic in the use of drugs other than brown sugar. The prevalence rate of consumption of alcohol, charas, ganja, and other narcotics is very high. The degree of addiction in the use of these drugs may not be as high as that of brown sugar, but these are also potentially harmful drugs. As evident from a large number of studies, a chronic alcoholic often ruins a happy family life. It has also been observed that prosperity in one's occupation has often contributed more to the liquor trade than to his family health. It is interesting to note that the sale of liquor is contributory to the excise revenue of the government. Here lies the paradox : "The excise department would be anxious to undo what the Health Department promotes" (Singh, 1981 : xvi).

8.18 In the context of the relationship between urbanization and drug addiction, it can only be said that both the demand and the supply sides of the problem exist in cities in an articulate form. The phenomenon of addiction does not originate in the cities, rather, it is the symptom of the malfunction in the society in general and possibly, the family in particular (Prasad, 1986).

नमो भगवते वासुदेवाय

CHAPTER 9

ADULT CRIME AND JUVENILE DELINQUENCY

Adult Crime

9.0 It is generally commented that, the rising tide of crime renders life in the city increasingly insecure. Official data do not correctly reflect the situation. For, a large number of incidents rather escape police attention or go unreported due to various reasons— inadequate staff in the police set-up, corruption, indifference of the public, fear of reprisals or hopelessness due to police impotence.

9.1 The rural-urban difference in the area of adult crime is a difference in degree, not in kind. The cities have potentially powerful spatial characteristics (size, density and heterogeneity) conducive to the articulation of all kinds of behaviour—normal or abnormal, but hardly do they answer the questions why children take to the streets in the cities or why prostitution preponderates in the metropolis. No mother—American or Indian—would like her child to be affectionally deprived; it is the system itself that promotes deprivation but, at the same time, provides opportunities, albeit anti-social, such as a woman driven out of the home turns to prostitution to make a living.

9.2 Therefore, the phenomenon of crime, delinquency and prostitution, which are most numerous in an Indian city, do not result from the spatial character of urbanization but, rather, they reflect the incidence of family deprivation and the process of masculine migration which, ultimately result from the exploitative path of economic development, we have selected.

9.3 With political clout and business patronage, the cities are becoming plagued with crime. There is a lingering public suspicion that instruments of law and order are hand in glove in the 'game' and get their 'hush' money. There is increasing evidence that, besides traditional crime, the local gangs indulge in extraction of protection money. Linked with the larger network, under their god-father, they become handy during elections for local political bosses. Some of whom emerge from these gangs. Operating under the 'big boss' in Mafia style, these gangs promote vice dens, peddle drugs, act as fixers for warring business cliques, and control the city's slum population. They have eminent lawyers to plead their cases, political clout through their vote-banks and have on their roll professional sureties as well as scapegoats. The crux of the matter has come to be that certain types of businessmen and politicians need criminals as much as criminals need them.

9.4 Reports in the press bear testimony to the increasing activity of such gangs, and police records now have considerable information though it is not open to the public. However, since our exercise to assess

the crime situation and the emerging trends will have to depend almost entirely on the "official" crime statistics, it will be prudent to keep in view both the difficulties and hazards of such a review. Principally, one has to base these views on the data which are quite imperfect, because of the various factors. Though crime known to the police is the best available index, since it represents crimes reported to the police by citizens, or crimes discovered by them, the recorded data depend on police efficiency. Hence, the official statistics of known crimes cannot, and do not, represent an accurate picture of the real amount of criminal behaviour. The latter is said to be always greater (how much greater is anybody's guess) than the amount reported. Unless the police force is ubiquitous, crime can only be recognized if it is reported by the citizen, whether as victim or witness.

And, there are many reasons why people may be reluctant to report, such as :

- (i) the offence may be trivial;
- (ii) the police station may be far away (there is said to be hypothetical ratio between the importance of the crime and the distance to the police station) ;
- (iii) the credibility of a productive outcome through the various features of the legal system;
- (iv) the fear of reprisal or harassment from the criminal or his associates;
- (v) the offence may be of an embarrassing nature to the victim (sex offences);
- (vi) victimless crime; as in narcotics case, gambling, or prostitution, where they may neither be victim nor have a witness who feels that a wrong has been committed;
- (vii) especially in juvenile cases, neighbours may adjust payment for property damage with the parents of the offending child; storekeepers may stop a young shop lifter as he leaves the store and release him of stolen articles; many more types of delinquencies may be glossed over by observers, even by the victims, as part of the process of growing up.

The Extent of the Problem

9.5 The available official data are also not analytical in all dimensions, although, it must be noted that *Crime in India*, the publication of the Bureau of Police Research and Development, has improved in its content and analysis over the years. The first

aspect to be looked at should be the trends in crime, their overall increase or decrease over the years. The incidence of crime in the country, during the year 1981 (cognizable crimes under the Indian Penal Code), showed an increase of 1.3 per cent with a total of 13,85,757 as against 13,68,259 in 1980. These figures also include crimes committed by juveniles.

9.6 The overall increase in the I.P.C. crimes during the period 1971—1981 was 45.5 per cent while the increase in the population (of India) for the same period was 24.1 per cent. The rate of crime per lakh of population also showed a rising trend as it is evident from Table 9.1.

9.7 The proportion of crimes committed in the cities of India, to the total number of crimes in the country as a whole, is significantly small. For example, the data on crimes in 118 cities show that their contribution to the total I.P.C. crime of the 12 states (for which data are available) is only 27.28. However, in some individual states (Maharashtra and Uttar Pradesh), their cities' contribution to the total number of the I.P.C. crimes of these states (38.93 per cent in Maharashtra and 45.42 per cent in Uttar Pradesh) is higher. The higher incidence of criminal activities, in some specific states, is related to the socio-economic structure of these states, because it is quite likely that the rate of crime may be more in the cities belonging to those states which have the larger urban-industrial base and where the rich-poor gap is higher and more visible. Lack of land reforms may feed into these cities.

9.8 Cities generally accommodate a large number of people within a limited space. Therefore, an attempt to compare the incidence of crime between the cities and the country as a whole, based on simple proportions, may not provide us a methodologically appropriate picture of the comparative profile of criminal activities between rural and urban areas. Moreover, the cities, for which the data are available, are those having a population of more than 1 lakh. The analysis of crime in the country as a whole, and those in the cities, does not give us the picture of rural-urban difference in crime as these cities do not represent the entire urban areas including the small and medium towns. In order to avoid this problem, partially, we have compared the volume of crimes per lakh of people in the country as a whole and in the city. As stated earlier, the analysis is restricted to only 12 states of India with their 118 cities having a population of 1 lakh, and above, for which data are available (Table 9.2). Such a comparison suggests a much higher incidence of crime in these cities than in the non-city areas of the country as a whole.

9.9 This raises the question whether urbanization stimulates the rate of crime. One way to analyse the relationship between urbanization and crime, in the major cities of India, is to compare the growth rate of population with the rate of crime in these cities over a period of a few decades. The following observations can be made on the basis of an analysis of the available data on the urban population growth, and the rate of crime in selected Indian cities over a period of three decades. There is no significant linkage between the high rate of urban growth and the increase in the

I.P.C. crime rate in the cities for which crime data are available, uniformly, from 1961 onwards. For example, in Bangalore, where population had grown very rapidly during 1971—81 there was no significant increase in the crime under the I.P.C. during the same period. On the contrary, while the growth rate of the population of Bangalore during 1971—81 was in the order of 76.2 per cent, the crime under the I.P.C. in Bangalore had declined from 107.57 per cent in 1961—71 to 91.07 per cent during 1971—81. In the case of another city (Madras), while the rate of population growth had declined from 63 per cent in 1961—71 to 34.9 per cent during 1971—81, the rate of crime under the I.P.C. was much higher (117.80 per cent) than what it was in the previous decade of 1961—71 (26.71 per cent). In a number of cities, where population growth had been insignificant during 1971—81, compared to the previous decade of 1961—71, the I.P.C. crime rate grew significantly during 1971—81 compared to its rate of crime during 1961—71. The detailed figures showing the growth rate of crime under the I.P.C. and the population growth rate during 1961—71 and 1971—81 for eight cities, for which data on crime under the I.P.C. are available, are shown in Table 9.3.

9.10 Do the above data indicate a negative relationship between the increase of urban population and the incidence of crime? It is possible that rural migrants to the city do not necessarily swell the rank of criminals immediately after migration but, over a period of time, the pressure of population grows by migration and natural growth and eventually, with the increase in tensions and loss of older traditional moorings, crime begins to manifest itself as the person imbibes the city culture and copes with the stress resulting from frustration and struggle for survival in a faceless city. Hence, this finding has significance for urban growth.

9.11 In the context of the relationship between crime and urbanization, it is often observed that, if not the crime as a whole, the particular types of crime, e.g., crime against person or property, may have some relationship with urbanization in terms of population growth in an urban area. The data shown in Tables 9.3 & 9.4 do not provide a uniform picture of the impact of population growth on the crime against persons and property in the cities under study. The impact differs from one city to another. For example, in Ahmedabad, where a lower population growth had been recorded during 1971—81, the I.P.C. crimes against both property and person increased significantly during 1971—81.

9.12 In the case of Bangalore, which had grown very rapidly during 1971—81, crime against person grew by 238.8 per cent during 1971—81, although crime as a whole declined. In Calcutta, both the population and the crime against property have increased simultaneously during 1971—81. In the case of Bombay and Madras, the IPC crime against both person and property has increased considerably during 1971—81 despite the fact that population growth rate in these cities has declined during 1971—81 (Tables 9.3 and 9.4).

9.13 The data reported in the Tables 9.3 and 9.4 also suggest that except in Calcutta, although the overall increase in the population of crime against property is low, compared to that of crime against person, sheer

number of crimes against persons has been much higher in the cities under comparison during the period of 1961 and 1981. Secondly, it has also been noted that the increase in both these types of the I.P.C. crime in these cities during 1971—81, has occurred independent of the change in population growth of these cities during 1971—81.

Juvenile Delinquency

9.14 In the case of 4 out of 8 cities, the growth of population, and the rate of increase in juvenile crime, have shown some relationship consistently over three decades. The cities which have shown this relationship include Bangalore, Calcutta, Hyderabad and Madras. Ahmedabad, Bombay, Delhi and Kanpur have not shown any such relationship over the decades. Ahmedabad has exhibited a high negative correlation between its population growth and juvenile crime. Except for Delhi, Hyderabad and Kanpur, in the remaining five cities, the sheer number of juvenile crime has increased significantly in 1981 compared to 1971.

9.15 It is common knowledge that the younger age groups contribute substantially to the situation of crime in any country. The young adults are more prone to crime and this age bracket is usually considered to be 16 to 25 or, sometimes, older, even upto thirty years. However, although age-wise data available to us are only upto 21 years, it may be worthwhile to look at the spread.

9.16 A total of 61,017 crimes were committed under the I.P.C. by the juvenile (upto 21 years) and youthful offenders during 1981, against 55,129 in 1980, recording an increase of 10.7 per cent in 1981 over 1980. The juvenile and youthful offenders were responsible for 4.4 per cent of the total IPC crimes reported during 1981 against 4 per cent during 1980. The volume of juvenile crime per lakh of the population was 8.9 for 1981 against 8.3 for 1980.

9.17 The data of juvenile crime under the IPC reported in *Crime in India* suggests that the proportion of involvement of juveniles in crime showed continuous increase from 2.8 per cent to 4.4 per cent from 1971 to 1981. Similarly, the volume of juvenile crime per lakh of population also increased from 4.9 in 1971 to 8.9 in 1981. Additionally, under the Local and Special Laws a total of 97,744 offences involving juveniles were recorded in 1981 as against 82,893 in 1980 registering an increase of 17.9 per cent in 1981 over 1980. The largest contribution to the total was from offences under the Prohibition Act (20,712) and Gambling Act (17,397). Three states, viz., Maharashtra (49,585), Gujarat (19,936) and Tamil Nadu (13,735), accounted for 85.2 per cent of the total number of offences under local and special laws recorded in the country. Furthermore, the incidence of juvenile crime did not bear any discernible relationship with the area or population of the states as becomes evident from the fact only that 462 cases were reported in Uttar Pradesh and 5,238 cases in Madhya Pradesh. This is due largely to the fact that states reporting juvenile crime are more progressive states with proper recording and facilities for juveniles. U.P. and M.P. are backward and not likely to have proper services reporting system.

Juvenile Apprehended

9.18 A total of 1,90,567 juveniles and youthful offenders were arrested during 1981, out of whom, 43.2 per cent were arrested for committing crimes under the I.P.C. Among the local and special acts, Prohibition Act and Gambling Act, the arrests of juveniles and youthful offenders accounted for 44.4 per cent of the total arrests i.e. 25,654 and 22,429 respectively.

9.19 A phenomenal increase of 84.3 per cent in arrests of juveniles and youthful offenders was registered in the year 1981 over 1971 i.e., arrests rose from 1,03,419 in the year 1971 to 1,90,567 in the year 1981.

9.20 Specifically, these trends suggests that not only the age group of 16 to 21 contributes most as expected, but the rate is on the rise. Statistics of the last ten years show that about 70 per cent of the juvenile apprehended belonged to the 16 to 21 years age group and it rose to 85.7 per cent in the year 1981.

Sex-wise, however, the percentage of girls' involvement in juvenile delinquency has been showing a downward trend since 1977. From 7.00 per cent in 1977 it sharply fell to 4.6 per cent in 1981.

New Trend in Urban Crime

9.21 One of the most significant aspects of urban crime is that, not only it has outnumbered rural crime, but it has also acquired new features over the years which can be considered typically urban, viz., white collar crime, attack against police personnel and police stations by organised criminal gangs, and the rise of conmen who swindle the public posing themselves as policemen or government officials. It is not possible to know the exact magnitude and dimension of these activities, which are mostly found in the cities, but a cursory look at the incidence of these crimes, as reported frequently in a daily newspaper of a city, would be enough to know how easily these new orientations to criminal activities are increasingly being sustained in our cities.

9.22 Another trend that has added a new dimensions to the crime in Indian cities is the incidence of riots which have increased significantly in recent years. In 1981, it was about 72 per cent up over 1980. Nevertheless, the share of riots in the total crime against person, in almost all the cities with 1 lakh population or above, is of a very high order, that is, 64 per cent. In the states too, the crime against person is dominated by the component of riots which is 72 per cent.

9.23 *Crime in India*—In which the data on riots are available, does not help us to know anything about how many riots have occurred along a communal lines. We can assume that much of what has been reported as riots are communal in nature, since except for a few incidents of trade union rivalry or interparty clashes, violence committed by a lynching crowd without having any communal element in it, is not very much prevalent in Indian cities. However, the communal riots and their after effects on women and children particularly need study. There is also some belief that the minority

communities not only are the sufferers but also suffer from excesses committed by the police of the lower constable ranks of the majority community and who also share from the attitudes of the common men. In this area, considerable thinking is required if the arms of the law are to be protectors and not perpetrators of crimes against person or property.

Causal Factors

9.24 Several studies, on crime in the city, indicate that rural-urban dichotomy does not provide a promising explanatory variable for the rate of violent crime in most third world countries. For, in most third world societies, rural crimes are likely to go unreported given the great distance between the police stations and the place of crime. In contrast to violent crime, the volume of crime against property and other victimless crime in Indian cities, have increased over the past decades.

9.25 The large volume of crime against property is indicative of the fact that urban crimes are mostly related to poverty and, if that is so, it is reasonable to conclude that most criminals come from poor families. Lack of data on the socio-economic background of the criminals, for all the urban areas of India, does not allow us to know clearly as to whether the criminals are poor or not, but information on the background of juveniles suggest that most of them come from the lower strata of

society. This is due to the fact that the well-to-do find the means to free their children even when apprehended by the law.

9.26 In the literature on urban sociology, urban crime is often associated with the anonymous character of a city where foot-loose young adults may easily fall prey to the urban vices. This is largely untrue, since many urban dwellers have been found to be well integrated into the community in most third world cities (Gilbert, 1980). Nonetheless, the character of a large city itself facilitates some types of crimes to occur more in the urban than in the rural areas. For instance, it is in the city that the incidence of white-collar crimes is most numerous. As the city offers the opportunities, such chances occur more in the city than in the village. Thus, not only the poor, but persons occupying various positions, may also indulge in various criminal activities; the organisational structure of the city provides the ideal breeding ground for such activities. Unfortunately, official data on white collar crimes in India are conspicuously missing in the *Crime in India* report published by the Government.

9.27 In the ultimate analysis, the phenomenon of crime is not the product of urbanization *per se*. Whether, it is juvenile crime or the crime committed by adults, the crime scene in India reflects, by and large, the exploitative nature of its social system which manifests itself in poverty and deprivation; and the perpetuation of poverty is the worst form of crime ever committed in a society.



CHAPTER 10

STREET CHILDREN

General

10.0 Urban pathology reveals itself in yet another growing urban tragedy, namely, the phenomenon of the street children. Although the problem of vagrancy exists throughout the world, it specially concerns the developing countries like India, because of the obvious reasons of poverty and destitution. Lack of empirical evidence makes it difficult to know how many children have actually taken to the street in Indian cities. However, an independent Commission on International Humanitarian Issues, estimates that there are currently over thirty million street children living in major urban centres throughout the world (International Association of Schools of Social Work, 1987). In this context, it may not be altogether unreasonable to assume that the number of street children, in most third world cities, would account for the major proportion of the above global figure since, unlike their counterparts in the cities of the rich countries, the children of many African, Asian, and Latin American poor families, may have no alternative but to take to the streets of their cities.

In the absence of country-wide information on the problem of street children in India, the observations that will follow, relate only to some specific case studies conducted in Bombay (Kapadia and Pillai, 1970; Saldanha, 1986; Shroff, 1987).

10.1 Although a typical street child is usually considered as one who has broken all ties with his original environment, empirical evidence suggests that the coverage of the problem may be extended to other categories as well. Broadly, two categories of street children are visible in some of the big Indian cities like Bombay: children who live with their families and often attend school, but work on the street. However, we are not including this category of children in this section. We describe street children as those who have run away from home and made their home on the street. The nature of the formal education received by the children is very limited. It was found that, while 25 per cent of the respondents of a study had never been to school 57.5 per cent had dropped out between the 1st and the 14th standard. Only 17.5 per cent had attended lower middle school, i.e. Std. V to VII. Being school drop-outs, they often lapse into illiteracy. Interestingly, many of the respondents were fluent in the languages other than their own and were found quite intelligent: they possessed a functional literacy that enabled them to read bus routes, bus numbers, destination of trains, film posters and the like (Saldanha, 1986).

10.2 The process of running away may take place at two levels: Firstly, it may take place within the city where the children belonging to the poor urban families, are no longer able to cope with the unpleasant and traumatized, home environment and, hence, leave their homes. In the studies on the run-away children in Bombay, it was found that, about 70 to 80 per cent

of the respondents were forced to leave their homes because of family circumstances like beating, frequent quarrels, neglect, ill-treatment and the death of parents. Secondly, running away may take place through a process in which the poor rural children, who have heard many things about the glamour of city life, but have never seen it, are easily attracted by the promise of quick gains, the lure of glamourized city life, very often stimulated by the film screen (Kapadia and Pillai, 1970; Saldanha, 1986).

The Profile of Street-Children in Bombay

10.3 In cities like Bombay, no special effort is needed to find the many street children; they are found all over the city, especially at railway stations, state transports depots, under the bridges, on the maidan and parks of the city. These children generally belong to the age group of 7 to 18 years; although there are a few girls among the run-away children, they are not generally found on the street; the children, come from the different parts of the country, urban and rural, with different ethnic backgrounds; all of them soon learn to communicate in the working Hindi language in a city like Bombay (Shroff, 1987).

Life Style and Work

10.4 Out on the street, the run-away child begins his life on the crumbs of the city, often getting his meal free from those distributed at various religious shrines in the city. The life-style of these children resembles the life style of the typical urban pauperised groups whose appearance upsets the dominant elite citizens of the city. It has been observed in the study, referred to earlier, that, because of their dirty, shabby appearance, many of the runways are not even allowed to use recreational facilities like public parks and so on. And, "due to the deprivation of healthy recreation, they find satisfaction in hedonistic pleasures and seek excitement and instant fun" (Shroff, 1987: 5-6).

Deprived of the love, affection and sympathy of a family and subjected to exploitation, abuse and unhealthy work conditions, these children develop a strong sense of inferiority and insecurity. This insecurity creates in them fear, anxiety, and guilt which affects their mental health and well being (Shroff, 1987 : 5).

10.5 Although he takes to the street alone, a run away child soon becomes the member of the existing gang groups. They find boys, similarly placed, who are prepared to help them. "Often, they come in contact with adults involved in anti-social activities who are ready to welcome new recruits into their gangs. Thus some of the boys get involved with anti-social gangs..." (Shroff, 1987 : 4). While the gang meets the emotional needs of the members, it also exerts group control. It has a strong influence of the behaviour of the members and group norms have to be followed.

10.6 This is how the phenomenon of street children contributes to the process of "lumpenization" in most third world cities. "Having fallen into a state of pauperization they (the lumpen proletariat) form a beaten and apathetic muster of lone men, women with children, children without parents, the maimed and the aged. Prepared to do anything that will earn them a penny, the majority roam the streets begging, collecting old paper and bottles, and scavenging through the city's garbage for an thing edible or usable" (Breman, 1976).

10.7 A great majority of the street children in Bombay, especially those who are engaged in the job of ragpicking, do a lot of hard work to earn a living. In the study by Saldanha conducted in Bombay, it was found that 42.5 per cent of the respondents worked for three 'rounds' with 6 to 8 hours a day. About 15 per cent worked for four 'rounds' with 8 to 10 hours daily. The first 'round' begins early in the morning, even before the Municipal sweepers sweep the roads; the last 'round' starts when the regular office hours in the city come to an end. The amount of money earned varies : 50 per cent of the boys earn between Rs. 5 and Rs. 15 daily, and 35 per cent earn Rs. 15 to Rs. 20; 15 per cent earn Rs. 30 to Rs. 40. Income from ragpicking is very irregular. During the monsoon season, the roads are flooded and there is little to pick up. Moreover, the shop rates are low during this season, since the stuff is mostly damp due to moisture. They, therefore, look for other seasonal occupations like working with caterers during the wedding season, reserving places in trains during the vacations, selling cinema tickets at higher rates, washing cars or taxis, and as vendors for the tea stalls. Some of these occupations expose them to various health hazards as most of these activities are carried out under

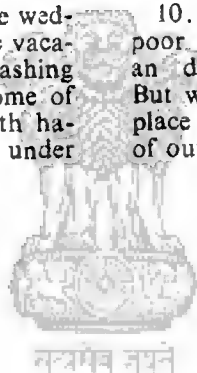
unhygienic environments (Shroff, 1937); many even go back to other towns and return after the rains are over (Saldanha, 1986).

10.8 Another aspect of the life-style of the street children who have taken to ragpicking in Bombay, relates to their pastime and habits. In the study quote above, 65 per cent of the respondents see three or more films during the week. Of them 20 per cent go daily for films. Besides films, they play cards, enjoy swimming in the sea and also gamble at times. Most of the respondents have been reported to be quite vulnerable to drug addiction; very often, they peddle drugs in order to procure money to buy drugs.

Urbanization and the Problem of Street Children

10.9 The socio-economic characteristics of the phenomenon of street children discussed above, indicate that these children belong to the poorest of the poor strata of Indian cities; they are destitutes who eke out their livelihood from the most marginalised occupations of these cities. Working as they do, they often become the victims of repeated attacks by police, and false accusations. "They are also the victims of homosexual attacks and cruelty by the anti-social elements" (Shroff, 1987 : 5). Those conditions exist despite the fact that there are a number of constitutional provisions for providing protection and opportunities to the children.

10.10 Our observations on the families of the urban poor and community, suggest that, despite poverty and despair, most of the urban poor are well integrated. But will this trend survive the changes that are taking place in the area of urban pathology? For, in most of our cities there is evidence of rising social problems.



CHAPTER 11

SUMMARY

11.1 Distorted Development

11.1 Issues in development planning have been mentioned in this report as the key to the social aspects of urbanization and urban problems. Therefore, urban development was situated and discussed in the context of development which has taken place in the four decade after independence. Increasing rural poverty, resulting from land alienation and degradation; displacement of populations for larger projects favoured against smaller ones such as dams or industrial projects; policies which have left large tracts of rain-fed and dry farming areas outside irrigation and agricultural policies lack of development of agro-industries in rural areas; the push from the village of the rural poor; distorted growth of urban centres without corresponding planned development, resulting in the creation of urban slums, have all been cited. While India has one of the largest populations, living in urban centres, it has yet to develop a perspective and an appropriate policy for rapid urban growth which is taking place, where almost one-third of people are likely to become urban dwellers.

11.1.2 In the city, the poor find their way into and are absorbed by the informal sector which typifies third world development. The existence of the urban informal sector in India is indicative of the limitations of the existing industrial policy. In fact, it has been the necessary condition for the development of the formal sector. While the formal sector has the bargaining power when it brings larger number of workers under one roof most of the workers in the informal sector remain powerless and inarticulate, because of the structure of their employment. Hence, urban poverty is evident.

11.1.3 However, due to the greater accessibility of a variety of opportunities in the informal sector in urban areas, the poor have at least some means of survival compared to their condition in their rural homes. The city satisfies the basic need for food and, in the long run, it also brings in a number of economic and social opportunities, and gives greater access to social services including education and health.

11.2 Urbanization : A Perspective

The urban environment is more integrating of differences than the rural environment but, at the same time, it is capable of bringing out more acutely the divisive forces based on deep-seated value differences and antagonisms which easily feel attacked due to the forces of change and the loosening of rigidities, earlier supported by rural structures. On the other hand, it is the contradictions in the urban situation which are accentuated and push for changes towards greater equity. Urbanization has been a powerful force in enhancing art, education, science and technology and evoked the resistance of subjugated groups, such as the poor or the women, towards their emancipation. However, it has also been responsible for the development of a degree of social pathology such as certain types of crime, prostitution

and various types of increased addictions. The relatively rising standards of living of some groups are blocked or threatened and lead to conflict and violence as the response of these groups. However, by and large, the poor are too disorganised to seize control in spite of their large numbers. Leadership, even agrarian leadership, has been nurtured and groomed in the cradle of the cities.

11.3 Positive Impact of Urbanization

The positive impact of urbanization in India is comprehensible in terms of rural-urban differentials rather than the absolute situation prevailing in the city. The physical quality of life indexes in the area of infant mortality, life expectancy and literacy, are higher in urban than in rural areas. Health and education services are both available and accessible. The economic gains of the migrants are higher than those who remained in the rural areas and absolute starvation is less reported. While urbanization reduces caste loyalties, it does not necessarily make the person more urban in his attitudes and values. The city tends to develop its own characteristics of homogeneity providing social supports to the people and preventing rootlessness and anomie, characteristics of western cities.

11.4 Urbanization and the Family

11.4.1 The inner ethos of jointness has not been completely shattered under the influence of urbanization, although, given the high concentration of job opportunities in a few urban pockets, economic compulsions and the problems of shelter, have made living under one roof impossible for a majority of the families in all the social classes. While classical joint families are disappearing, the extended family is still relevant.

11.4.2 Urbanization has also increased the scope for independent earnings by women. With increasing emphasis on personal compatibility, the marriage breaks down, when the emotional bonds are fragile and social forces do not exist to keep the marriage together, as in the joint family, where marriage is based on considerations other than the individual compatibility of the couple.

11.4.3 Besides dowry, there is an increasing desire for working wives among the middle and the lower income groups. In the absence of change in the social role of males, and the absence of modern conveniences and social services, the woman carries the dual responsibility at great cost. The problem of the aged is an emerging social problem. The problem is greater when the aged person becomes incapacitated and the son as also the daughter-in-law are working, or the living area is too small to accommodate a person who must lie down all day, such as in a 10 x 10 room.

11.4.4 The family has become a unit of consumption and urbanization stimulates the growth of expenditure, a large part being spent on consumer durables and intoxicants, the poor spending more on the latter and the rich on the former.

11.5 Urban-Rural Differentials—Effects on the Family and women.

11.5.1 Urban migration is now that of the family as a whole rather than only the breadwinner as it was, some decades ago. With increasingly high cost of living there is not enough money for a money order back home and the family left behind can no longer supplement the money order and support life in the deteriorating rural agricultural economy particularly with the growing scarcity of fuel, fodder and water. Life in rural areas for these women is one of drudgery for firewood, water and fodder; backbreaking work on E.G.S. sites, hunger, unemployment and insecurity. Hence, most migrants explain their presence in the city as being for work and food.

11.5.2 There is also relative personal freedom, breakdown of rigid caste, communal and social hierarchies and greater social mobility. Escape from incessant attacks by dominant groups on their person and property is another reason for exploited group to migrate. Hence, the city provides both economic and social survival.

11.5.3 Negative effects on the family and women cannot be denied with increased cash incomes being spent by the men on gambling, drinking and other social vices. Women, therefore, take up an increasing economic role and a greater part of the expenditure on food, fuel, lighting, water and medical care, and even clothing and house repair, is borne by them. Wife beating, child abuse, desertion, bigamy, all affect women. There is a high proportion of women-headed households.

11.5.4 A majority of children in urban areas attend Municipal schools. A majority—75 per cent—do not go beyond Class VII. Space for recreation is lacking.

11.5.5 However, in spite of these problems, rural life is not necessarily safe or healthier for families. Problems of wife beating, desertion and bigamy, as also intoxicants, are prevalent in rural areas, whether rich areas of the green revolution or in impoverished areas of Rajasthan. One-third of rural households are known to be women headed. Even though women in slums live in unhealthy surroundings, health indicators for urban areas are higher than rural. Urban women have a greater access to information, freedom of choice and utilisation of public services than in the rural areas.

11.5.6 The wage earning capacity of hitherto dependent family members, particularly women and older children, subtly alters the rigid age and gender hierarchies which characterise rural families. They thus begin to participate in major and minor decision making; thus seeds of egalitarianism are sown.

11.6 Community Dynamics in Low Income Colonies

11.6.1 Except for a very small minority of the upper class, who live in flats and place a high value on privacy and individual living, a majority of urban dweller slive

cheek to jowl in congested slum communities or pavements or, at best, in large chawls. This results in a sense of interdependence, reciprocity and a high degree of communication within the immediate community where the family resides. Studies and personal observations in slums and chawls depict the manifestations of the joint family characteristics in the immediate neighbourhood. In the absence of cash reserves and capital, it is this network of relationships, or social capital, that is the mainstay of the families of the urban poor and features very prominently in the coping mechanisms of families in crisis.

11.6.2 The degree of social homogeneity, the duration of a slum settlement and the social life which has ultimately evolved, in such areas, inevitably, reflect the various characteristics of the settlement. This obvious fact of differential characteristics of settlements, on a time-frame, needs to be mentioned as it is not taken into account in urban planning. There is a tendency to present a stereotyped urban slum-dweller, ratified by legal statute, such as a cut-off date to recognise a slum, when, in reality, the differences between slums call for differential specific interventions by the governmental and non-governmental organisations.

11.6.3 Politics has kept the poor divided and prevented their grassroot organisations. The cut-off date is generally utilised in political horse-trading while the basic issue of the right to shelter is evaded politically and by the bureaucracy. Slums are not the inevitable result of urbanization—they are the inevitable result of resisting an even process of urbanization at the policy level, as we do not accept and plan for in-migration in urban development exercises.

11.6.4 It is known that 50 to 60 per cent in large cities live on pavements and in slums, and at least another one-fifth in one-room tenements, such as "chawls", which are termed as "first class slums". It is a legal shelter which is the basic problem and not shelter *per se* which the poor provide for themselves and improve it incrementally as their economic position improves. The threat of eviction looms large and tends to create insecurity. However, the vested interests, that is, the illegal "landlords", and those with local political clout, prevent people from even using existing schemes to improve their living situation.

11.6.5 In spite of this untenable situation, the slum and pavement dweller provides, today, the vast network of services that the middle and the upper classes enjoy at cheap rates. The slum and pavement dwellers, if united, have the power to bring to a halt the entire urban system, so powerful is their role in the urban economy. Yet, the political and social forces which operate, at both the micro and macro levels, will retain the slum—if not in the line of vision of the privileged.

11.6.6 However, the process of living and working in the city environment, and understanding it, is beginning to create a greater awareness of their rights among the urban poor. It is no small wonder that virtually every slum has its own "committee" or local organisation. Many of these, in turn, are banding together into city level or national affiliations.

11.6.7 Unless urban planners see slum dwellers as equal citizens, with a right to life, the question of alternatives to the current social problems of the city will not be addressed in their appropriate perspective. Policies to depopulate the cities must start with the urban elite as it is they who generate the jobs which the poor service. Unless we are willing to face the socio-economic-political dynamics that create and maintain slums, the problem of shelter, which is the second major problem of the poor, after food, will not be solved.

11.7 Urban Tensions

11.7.1 Ideally speaking, the processes of modernization, and the consequent secularization, should dissolve ethnic identities and cleavages. One would expect to find non-ethnic tensions and conflicts, which cut across ethnic divisions. Such non-ethnic tensions are typically urban and are precipitated by accelerated urbanization.

11.7.2 While disturbances related to the non-ethnic urban tensions arising out of inflation, labour management conflicts, inter-union rivalries, student unrests and political violence, have been witnessed in almost all the Indian cities and towns, the ethnic tensions and conflicts in some cities have been increasing and have often taken a severe turn. The incidents in Ahmedabad, Baroda, Bhiwandi, Malegaon, Bombay, Delhi, Meerut, Moradabad, would almost outweigh the political and trade union related violence that have occurred in the recent past in Calcutta and other cities.

11.7.3 One of the principal reasons for the potential growth of ethnic violence in urban areas is that the process of urban migration alters, over the years, the ethnic composition of the cities. In almost all the regions of India, the religious minority, the higher castes and the people drawn from the region other than those to which the particular city belongs, are over-represented in the urban areas in general and in the cities in particular.

11.7.4 This kind of permanent alteration in the composition of population, and the ethnic arithmetic, adversely affect the political power of some groups. But this changing arithmetic is also a reflection of the new kind of opportunity structure and a new kind of distribution of gains of modernization which favour some ethnic groups and militate against other groups. An explosive situation thus arises.

11.7.5 Recently, some of the major Indian cities have become the springboards of various regional conflicts. The urban character of social tension, arising out of this conflict, is largely attributable to the nature of urban development itself. The concentration of the large scale industrial operations in a few big cities has resulted in the creation of a high ethnic division of labour in these cities. As a consequence, these few cities have become the settlements of highly heterogeneous groups.

11.7.6 Bombay and Bangalore seem to be the most heterogeneous cities of India. Madras is the least heterogeneous in terms of all the components of ethnic identity. The dichotomous nature of our urbanization can be held responsible for making one Indian city more heterogeneous or homogeneous than the other.

11.7.7 A city being heterogeneous should not have any problem as such. In fact, heterogeneity is a healthy sign of a cosmopolitan culture which lends support to national integration. The problem arises when the people of the state to which the city belongs, do not have a reasonable share in the economic opportunities of the city. Bombay experienced it earlier, Bangalore will not be behind, given the heterogeneous character of the city, as well as the increasing rate of migration from rural and urban Karnataka to Bangalore city.

11.7.8 In the recent years, we have been witnessing the phenomenon of delegitimization of the major political institutions. The political parties have lost their ethos and integrative capability; bureaucracies have become corrupt; trade unions are characterized by more economism. The decay of major secular national political parties has particularly encouraged the various kinds of tensions we have been discussing. This decay has left the field free to communal parties to exploit the real or imaginary urban grievances and frustrations.

11.7.9 It is often believed that the intra-city disparity in living conditions in terms of housing and other economic necessities, breeds urban violence and tension. The "demonstration effect" of extreme consumerism and ostentatious living of the few, on the poorer segments of urban classes, causes considerable anger among the poor.

11.7.10 However, a large number of studies, on the social and political correlates of urban migration in India, suggest that the migrants, in general, and the urban poor, in particular, are neither participants nor beneficiaries of most of the urban strifes and tensions.

11.7.11 Nevertheless, the urban poor often become the victims of communal riots. Their primordial loyalties are often exploited by the vested interests for political gains, in which case the poor may appear as participants of these riots. Even if they do not participate, living as they do with the least physical protection and practising their trades on the open roadside, they are among the first casualties in such riots.

11.7.12 But this does not negate the possibility that the poor will never be demanding. If poverty and exploitation among them are allowed to fester for long, the urban poor can also become active participants of urban tensions. It is the women and children who bear the worst brunt of urban riots.

11.8 Drug Addiction

11.8.1 It is the psychotropic drugs, especially the synthetic adulterated form of the heroin, which has recently swept the addiction scene in the major cities of India. The abuse of these drugs has percolated to the poorest strata of the cities. Among the poor, most of the addicts work in the informal sectors of the cities; the rest are largely unemployed. While the abuse of drugs, other than brown sugar, may be attributed to the popular stereotypes, such as frustration, stress and value conflict, there is no apparent reason why addicts have changed to brown sugar except for its cheap price and its prevalence as a fashion drug. Adulteration of

brown sugar has made this particular drug relatively cheaper; the marketing of such cheap adulterated quality of brown sugar has also become easier so as to reach the poorer sections of the city. The prevalence of brown sugar seems to have some self-limiting factors inherent in the drug itself; to augment the market, it has to be cheaper and, in order to be cheaper, it has to be more adulterated, and the more adulterated it is, the less kicks it offers. Some addicts are reported to have resorted to the usual drugs other than brown sugar, since it no longer gives them any *nashu* (kicks). It is not brown sugar addiction, but the peddling of this drug, which is likely to cause a menace in urban life and needs the major attention of the law enforcing authorities.

11.8.2 The findings of the existing studies on the prevalence of drug abuse, among the urban poor in India indicate that the main causes of their involvement in the abuse of drugs, especially brown sugar, are peer group pressures, unemployment and the dissatisfaction arising out of their employment in the informal sector. Addicts from poverty groups gave no evidence of any psychological reasons for the abuse of drugs as it mainly resulted from the economic problem of job-related frustration, frequent job retrenchment, low wage and insecure conditions. Among the unemployed poor, it was their aimlessness—no job, less education as the opportunity in the successive levels of education, after SSC, is extremely limited, and no motivation for any social or political activities. A number of experts held that peddling did provide the entry point for addiction among the unemployed urban poor.

11.8.3 For the well-to-do classes, psychological factors were more pronounced; satisfaction or curiosity, fun or kicks, coping with frustration about the existing value system, failure in love affairs and relief from family pressures (the social and economic pressures of the families are transmitted to the young adults in the family).

Usually, it is not the addiction *per se* which leads to criminality, but other factors, such as the need for money to procure drugs. Crimes resorted to are theft, burglary, pimping and cheating. The phenomenon of addiction is the symptom of the malfunctioning of society in general and, possibly, the family in particular.

11.9 Adult Crime and Juvenile Delinquency

11.9.1 Crime for economic gains dominates the pattern of crime in most Indian cities. The rural-urban difference, in the area of crime and delinquency in India, is a difference in degree and not in kind. Although crimes are numerous in Indian cities, they do not result from the spatial characteristics (size, density and heterogeneity) of the city but, rather, reflect the incidence of poverty and family deprivation which result from the exploitative path of economic development. With increasing levels of expectations some already better off sections find their economic mobility blocked. There is, therefore, an increasing evidence of establishment of local gangs operating under the "big boss" in Mafia style. Linked with the larger network, they become handy during the elections for local political bosses, some of whom emerge from these gangs.

11.9.2 The proportion of crimes committed in the cities of India, to the total number of crimes in the country as a whole, is significantly small. However, in some States (Maharashtra and Uttar Pradesh), their cities contribution, to the total number of I.P.C. crimes of these states, is higher. This may be due to the structure of these states, where the cities have a larger industrial-urban base and the rich-poor gap is higher and more visible. Lack of land reform may feed into these cities. There is, however, no significant linkage between the high rate of urban growth and the increase in the I.P.C. crime rate in the cities for which crime data are available, uniformly, from 1961 onwards. It is possible that rural migrants, to the city, do not necessarily swell the ranks of criminals immediately after migration, but, over a period of time, the pressure of population grows by both migration and natural growth, and, eventually, with the increase in tensions and the loss of old moorings, crime begins to manifest itself.

11.9.3 The proportion of juveniles involved in crime showed a continuous increase from 2.8 per cent to 4.4 per cent from 1971 to 1981. Similarly, the volume of juvenile crime per lakh of population has also increased from 4.9 in 1971 to 8.9 in 1981. Additionally, under Local and Special Laws, the increase was as much as 17.9 per cent in 1981 from 1980. The largest contribution to the total was from offences under the Prohibition and Gambling Acts. A phenomenal increase of 84.3 per cent in arrests of juveniles and youthful offenders was registered in the year 1981 over 1971. About 85.7 per cent of the juveniles apprehended in 1981 were 16 to 21 years.

11.9.4 In the ultimate analysis, the phenomenon of crime is closely linked to the exploitative nature of its social system which manifests itself in poverty and deprivation, and the increasing expectation of groups which remain socially and economically blocked. Poverty itself is the worst form of crime committed in a society.

11.10 Street Children

11.10.1 The problem of street children is a growing urban problem in many cities in India. Although the problem exists throughout the world, it specially concerns the developing countries, because of obvious reasons of poverty and squalor. The exact extent of this growing urban tragedy is not known, but one can easily see these children all over an Indian city, especially at railway stations, under the bridges and flyovers, and in the parks of the city they generally belong to the age group of 7 to 18 years and most of them are males.

11.10.2 Out on the street, a street child begins his life on the crumbs of the city's garbage, often getting his meals from those distributed at various religious shrines in a city. The lifestyle of the street children typically resembles the urban pauperised groups whose dirty appearance often upsets the urban gentry. Within a few days after their arrival in the city they gradually learn the art of making a living. By profession most of the street children are ragpickers, street vendors, porters, bootleggers, shoe shines and cleaners of various kinds.

11.10.3 The runaways constitute the dominant group among the various types of street children. Destitution, combined with affectionless domestic environment, involving ill-treatment and other forms of cruelty to children, and the lure of the gaiety of metropolitan cities, are common casual factors that force the poor children to take to a city's street.

Conclusion

The report is an overview of the social aspects of the urban situation. It situates the problem of urbanization in the socio-economic-political context. It provides a social perspective on urbanization, the urban rural

differences and the implications for urban life; the two major factors that make the fabric of the social structure, the family and the community, the dynamics in the urban community, social tensions, social pathological manifestations of drug addiction, adult crime, juvenile delinquency and street children. In a short report no attempt was made to make an exhaustive study of the social problems but observations were made on some major ones affecting society. Our focus has been in largely on the poor as they represent the majority in this country and it is to their problems that urbanization will ultimately need to find a response. That urbanisation has meant some chance to meet their survival needs, has been brought out in the report.



CHAPTER 12

RECOMMENDATIONS

12.1 Development And Change

12.1.1 The specific recommendations with respect to development and change cannot be elaborated here as they are well known and a subject of much of the development literature. Suffice it to say here that recommendations for urban social policy cannot be made in isolation and must necessarily emphasise a development pathway which would:

- (a) enable people to find new avenues of employment and self-employment;
- (b) facilitate cooperativisation in an agro-industrial context;
- (c) promote environmentally sound, non-destructive and sustainable technologies for energy-generation and agro-and forest-based development interventions;
- (d) strictly enforce legislation such as Minimum Wages Act, Contract Labour Act, Factories Act, Urban Land Ceiling Act, Migrant Worker's Act;
- (e) relocate industrial development with the requisite modern infrastructure (e.g. telecommunication, power and transport) to make the policies effective.

12.1.2 The existing policy measures related to urban development do not contain any national programme focussed specifically on the aspects of legitimacy of the urban informal sector—a sector which not only substantially contributes to the urban economy, but also provides livelihood to the millions of urban indigent groups at no cost to the state. The government will have to think of ways to encourage the urban informal sector to enhance their organizational capabilities to be able to look after their legitimate interests, as well as to extend legislation protecting their rights and extend to them security as in the formal sector.

12.1.3 People-displacing projects must be minimised, and smaller projects constructed such as dams and hydel projects, so that large-scale displacement does not occur resulting in the poverty of thousands to pay for the affluence of others. The rights of tribals to the forests is a further case in point. They must be made partners in the preservation and utilisation of forests instead of being treated as its enemies. Ultimately, redistributive justice should inform all the activities of our national life. Unless we radically view the change in our overall policies, urbanization cannot, by itself, become a progressive and well-planned process in which rural migration is more controlled by the development process itself, and better anticipated for absorption in a city growing through such migration and planned development.

12.2 The Family

General

12.2.1 All the recommendations given below relate only to the families of slum and pavement dwellers. While several specific services and facilities are needed to improve the situation of the poor urban family, there is no gainsaying the fact that basic changes in the physical environment transcend all others. The following inputs will therefore, make a positive impact not only at the community level, but on individual families.

12.2.2 Adequate living space must be provided. The present trend of providing 10' × 12' or 10' × 15' pitches, in most resettlement colonies or sites and service schemes, is totally inadequate for healthy family life. Assured long-term tenure, rather than the present system of insecure, temporary tenure, inhibits poor families from investing in improving their shelter since they incur substantial losses when the colony is resettled again after a period of time.

12.2.3 Assured, adequate and appropriately designed public amenities such as latrines, water, drainage, and street lighting, are a must. The tensions generated by the lack or inadequacy of such basic services lead not only to family quarrels but inter-familial feuds and vendettas.

12.2.4 Tenancy in public housing schemes must always be given in the joint name of the male and female heads of household. This measure will not only safeguard the rights of women and give them a legal share of the shelters they occupy, but reduce the indiscriminate casting-out of wives by husbands for even minor infringements, and possibly act as a disincentive in the incidence of bigamy in this section of the urban population.

12.2.5 Allocation of public funds must be made on massive scale for child-care centres and creches for children below 6 years in slums and low-income areas. This is a crying need of poor families, with women being employed in the informal sector or in unorganised small-scale industries:

- (i) These centres should be financed by Government or Municipal Corporations but preferably operated by voluntary agencies or local community/ women's organisations. The money can be collected by a cess on all industries, including the small scale sector. Such facilities may be shared by workers in the formal and the informal sector so that they are nearer their homes and children need not be carried long distances to the mother's place of work.

- (ii) Supervisory Committees comprising of respected, trained and experienced persons and voluntary agencies, unconnected to any political party, should be set up at the city level for cities with less than 1 million population, and at ward level for larger metropolitan areas.
- (iii) The supervision and monitoring of the qualitative and quantitative aspects of the centre should be left to this committee with the help of trained child development workers or social workers.
- (iv) The child care workers (care taking staff) for these centres should be selected from within the communities themselves. Preference should be given to young girls or older women who are widowed, deserted, divorced, or otherwise destitute. A team of one young and one older woman should be ideal.
- (v) The training of the child-care workers should be entrusted to an experienced, professional voluntary organisation with the requisite capability and a proven track record (e.g. mobile Creches).
- (vi) Family day care facilities should also be recognised as an alternative to creches. They should be professionally supervised by professional social workers.

12.2.6 In a similar manner, funds may be allocated for local women's groups or community organisations to start community kitchens in slums and low-income areas, along the lines of the 'Indira Kitchens' of Pune. Although cultural and religious taboos related to food may depress demand initially, the convenience and cost factors gradually take over. Community Kitchens considerably reduce the drudgery of women in the family.

12.2.7 Constructive recreation-cum-non-formal education centres must be created in all slums for children of higher age groups who cannot attend school or are working. These centres should have timings suited to the children's needs. This is particularly important for girls who may, otherwise, get no opportunity for literacy due to their work burdens at home. These centres could also become venues of decentralised short-term, vocational training courses.

12.2.8 Shelter homes for women and children, escaping from family violence, are a must at the ward level for all income groups. The design and operation of these homes may be developed with the assistance of professional social workers and voluntary women's organisations who have been providing such a service on a small scale over the past decade.

12.2.9 Services for the family should be provided through Family Service Centres to help women in distress, widows, those with marital and parent-child problems, those experiencing family crises and related problems, such services should be located in busy market areas and in slum colonies to make them accessible to the

people and especially the poor. They should also function as Citizen Advisory Centres giving a variety of information on services.

12.2.10 Trained social workers should be employed under the police department, and attached to key police stations, especially those with lockups. Cases of harassment of women by families should be handled by such workers on the lines of an experiment now conducted by the Bombay Police and Tata Institute of Social Sciences.

12.3 The Community

12.3.1 The growth of slums is basically a manifestation of the inability of the state to provide affordable shelter to large sections of low-income population in the urban areas. Manipulation of resources and services such as land, water, electricity, emerges from the struggle to meet the basic need for shelter. An appropriate perception of this given reality is necessary to provide pragmatic and viable interventions.

12.3.2 In the new approach towards housing, indicated in the Draft National Housing Policy, the role of governments, both at the central and state levels, is enabling/facilitating shelter-development. In operational terms, this demands critical interventions of the state in areas, such as land, finances which are available, and counter-acting the market forces by providing and encouraging cheaper and more available building material. The time-gap between the allotment of a site, or the resettlement on a new site, and the shelter consolidation process, needs to be reduced considerably. In this manner, the biggest fear in schemes of low income families, i. e. the reselling and speculative processes, may be reduced considerably.

12.3.3 It is essential that the services are managed at the community level and further growth is curtailed within well defined boundaries of slum communities. In upgradation projects, this attempt is being undertaken, through the process of cooperativisation of residents of well defined slum communities. The World Bank Project, under the Maharashtra Housing and Area Development Authority is conducting one such programme. The subsequent responsibility of services in such an area is that of the housing society of the residents. Where it is not possible to hand over the lease to the society of slum dwellers, other institutional mechanisms, like service cooperatives should be introduced in the area. The Slum Improvement Act in Maharashtra had a clause for the introduction of Panchayats in slum areas which was never undertaken. Some form of institutional mechanisms for de-centralised administration is of paramount importance.

12.3.4 Payment towards services, up till now, has been an issue with political overtones. It is imperative that a rationalised form of payment towards all services is done to ensure not only some additional funds in the city's exchequer, but also accountability towards the consumer, which does not exist today.

12.3.5 Large tracts of land on the urban periphery need to be developed into 'mixed' housing for all income groups. Only then will the poor be willing to move and

to live in such neighbourhoods where inter-linkage in employment are established between the various socio-economic groups.

12.3.6 At the community level, there is a need to develop an infra-structure of social services of health, education and social welfare. There is a need to develop Social Service Cells, staffed by trained social workers, to develop a community process of identification and social management of its services. The cells could manage the aforementioned community centres with recreation, non-formal education programmes and creches for children.

12.3.7 The process of displacement must become a process of negotiation and adequate compensation. Thus the negative social, economic and psychological impact must be reduced on human beings who are already the victims of their environment. Understanding the nature of reciprocity, and extended family relationships in the immediate community, any shift must bear in mind that social networks must be kept intact. All shifting should take place after full infrastructure facilities, transport and social services are available at the new site and shifting should coincide with the end of the school year.

12.3.8 Sites and services schemes, with title to land for developing incremental housing, must be made possible for migrant groups to cities, if the reality of such migration is to be accepted and worked through. The rich also migrate and are known to do so in larger proportions to the poor. Because they can command better housing, they do not live on pavements, and do not, therefore, command the same visibility. Once the fact of equal right to migrate is acknowledged, there is better possibility of such migrants being housed.

12.4 Urban Tensions

12.4.0 The recommendations given below relate mainly to the ethnic conflicts which have become a fast spreading menace in most Indian cities. The non-ethnic urban disturbances are mostly contingent in nature and they can be handled by effective negotiations.

12.4.1 Urban tensions tend to assume ethnic lines in the absence of strong urban social and political institutions. Therefore, the process of delegitimization of major political institutions must be discouraged. Trade unions should rise above narrow economism. Corruption in the bureaucracy must be stopped at any cost. Above all, it is necessary that the secular national parties should be strong enough to produce new and strong identities which cut across the ethnic cleavages.

12.4.2 Concentration of large scale industrial and commercial establishments, in a few metropolitan centres, facilitates the creation of a high ethnic division of labour. Ethnic heterogeneity in a city must not be allowed to grow at the expense of the people of the region in which the city is located. A balanced regional development would provide appropriate conditions under which the potential for urban conflict, based on ethnic heterogeneity, can be averted.

12.4.3 Urban community centres, which promote community participation and decision making and develop community identity, can be essential instruments

for reducing urban tensions. They lead to social interaction among various ethnic groups, thus lowering suspicion and distrust of the unknown. Hence, it is to the interest of such cities to promote centres for community participation and interaction, under the leadership of professionally trained community social workers.

Tensions easily ignite in conditions of social deprivation. Hence, many of the recommendations given in the section on "The Community" also apply here.

12.5 Drug Addiction

12.5.1 The supply of drugs, not the demand for it, is to be given top priority in matters of prevention of the recent spread of brown sugar addiction among the urban youth.

12.5.2 To make the Narcotics and Psychotropic Substances Act, 1985, more effective, drug peddling should be made a non-bailable offence. This will prevent the big-wigs, involved in the business, from their efforts to wriggle out of the law with the help of unscrupulous lawyers and some corrupt politicians.

12.5.3 Special courts should be set up to deal with the drug peddlers for speedy trial. This may act as a deterrent against further deterioration of the problem among the potential abusers, and peddlers.

12.5.4 There is a general complaint that the existing strength of the police dealing with drug peddling, in all the cities, is inadequate to handle the problem. A crack police unit, with high mobility, is essential for this task.

12.5.5 As regards the curative measures, it is recommended that emphasis should be laid more on adding to the bed strength in the existing government and municipal hospitals than on opening special detoxification centres which would involve large investment of finance and manpower. This is because drug addicts require several supportive medical services including medical supervision and intensive care.

12.5.6 Nevertheless, the financial position of the voluntary organisations, working in the field of drug addiction, should be strengthened with Government aid to supplement the efforts. There are already several such de-toxification centres which could do more work with additional financial help from the government.

12.5.7 Feature films and/or T.V. serials, which seem to glorify drug taking, should be totally discouraged. Children are not mature enough to get the inherent message of the Indian feature films. They can be easily carried away by the manifestations of the problem in the form of adventure. Documentaries on the problem, highlighting its effects (like those shown in the case of cancer eradication programmes or the recent vaccination campaign) are welcome.

12.5.8 Instead of sponsoring stray research studies to different agencies and individuals, a comprehensive survey of addicts throughout the country should be floated in order to assess the magnitude of the problem. It is to be pointed out here that, despite its positive

effect on drug abuse in India, the recent Psychotropic Substance Act, 1985, has generated some fear among the addicts to disclose frankly their problems. Some ways have to be found to remove this difficulty that may adversely affect the proposed survey.

12.5.9 There is a need to develop community based drop-in centres, counselling services and rehabilitation programmes. A twenty-four hour 'call for-help' service needs to be established in all cities which have a high number of drug addicts. The need is for emphasis on prevention, treatment and rehabilitation.

The suggestions mentioned above are those for short-term measures related to the abuse of psychotropic drugs. Removal of the evils of the entire addiction phenomenon from the society, needs long term planning and programming. If the general addiction scenario of the abuse of various drugs in India reflects the evil effects of urbanisation, as manifested in poverty, relative deprivation and unemployment, these are to be minimised at any cost. Implicit in this suggestion is the recommendation for a better model of development.

12.6 Adult Crime and Juvenile Delinquency

12.6.1 The obvious concentration of the poor and the rich, and the difficulty in apprehending the criminal in heterogeneous surroundings, explain why crime accentuates in cities. Measures with regard to both these factors must be ensured in order to achieve greater prevention of crime in cities, as much as change in our development perspectives.

12.6.2 With respect to the control of crime, the administration of law and order needs to be qualitatively improved. More visibility of the police in both personnel and equipment is needed a high degree of mobility, is needed especially on 2 wheelers, for patrolling the streets for crime against person and property and automobile crime. (The police should not respond by sending them on the regular public bus as it sometimes happens today). Besides, the nexus between the criminal politician-police needs to be broken. There should be a separate police force for "morcha bandobust" and for VIP duty, so that the policeman on the beat is not taken off from his normal duties.

12.6.3 The working and living conditions of the police force are appalling in the cities. Much needs to be done especially to provide a decent salary and housing to the police force, if they are to become a loyal force and if temptations are to be reduced. The police force is drawn from the public and reflects, therefore, its values. They cannot be different in their behaviour, loyalties and perceptions unless effort is made to meet their legitimate needs and, at the same time, they are given the necessary training inputs, through modern training methods, to change their attitudes, especially to violence against women and minorities.

12.6.4 Political interference in the police force is another area that should not be permitted if the police are to perform their legitimate functions.

12.6.5 As for juveniles, it is suggested that urban centres should have school social work, community centres with social workers and supervised recreational

facilities, the development of vocational training at the school level, making school buildings available in the evenings for developing recreational and vocational activities. The school must become the focus for child, youth and adult activities, especially in low income neighbourhoods. School social work, on the lines of work undertaken in the Municipal Schools in Bombay, needs to be introduced in all urban areas, especially in the schools located in slum communities. Such projects have, as their focus, the child, his/her family, the local community and the school as a system. The project was initiated by the College of Social Work (affiliated to the University of Bombay) in collaboration with the Municipal Corporation of Greater Bombay which has now taken over the project.

12.6.6 The new juvenile justice Act, 1986, should be implemented with speed in all urban locations for which special funds need to be allocated by the respective state governments.

12.7 Street Children

12.7.0 While the promotive and preventive solution to the problem of street children should address themselves to the larger issues of development and change. Some specific steps to mitigate this problem are not difficult to implement.

12.7.1 First and foremost, we need to know the scale and the scope of the problem of street children in the major cities and towns of the country. This can be done by conducting well-designed surveys of street children in the metropolitan centres of India.

12.7.2 The overall thrust of the Government's intervention in the problem should aim at providing the opportunities to children on the street for their all round development in accordance with the rights guaranteed by the Constitution of India. In cities like Bombay, a number of target groups, the street children, have already been identified and some projects regarding the various intervention strategies have also been launched with a number of specific objectives: creation of awareness among the street children about their life-situations; enabling them to have access to various basic services like health, education, housing and employment; making efforts to reunite them with their families; generating co-ordinated effort among the various groups of street children themselves and taking up issues of common interest such as, cooperatives of ragpickers; creating interest and concern in the wider community about the situation affecting street children; working out collaborative intervention involving the police, local authorities and the Government.

12.7.3 Describing the need for social work skills. Shroff describes a project of the College of Social Work (affiliated to the University of Bombay).

The project is based on the firm conviction that every street child possesses inner strengths and potentialities which must find expression... The social workers, therefore, respond to their needs as defined by them and activities are related to their aspirations and possibilities. Their own involvement in decision making for their lives is crucial for the success of such an endeavour.

She goes on to explain the need for outreach work to form a trust relationship, followed by the establishment of a community centre close to their area of operation so that they can drop in whenever they need personal help or service. Utilising the earlier members, new ones are contacted.

Through individual and group counselling, some children were successfully taken "off the streets" to take up education, residential care, or vocational training. Some "ex-vagrants" continued to visit the centre to demonstrate a change in their life situation.

As these children live in groups, the group situation was found to be more effective than a "one-to-one" situation.

During the individual interview sessions, some of the boys reveal their past and often express their desire to write letters.....Thus an effort is made to reunite them with their families.

Shroff emphasises the need to meet their deprivations through recreational programmes, which are voluntary followed by snacks. Education on health hygiene and nutrition is conducted and bathing and medical facilities are provided. They need a place to keep their belonging and a place for their savings. Vocational training in tailoring, driving and mechanical skills were imparted. Work was done with the police to issue identity cards to the children if "they regularly attend group sessions and show signs of a positive behavioural change".

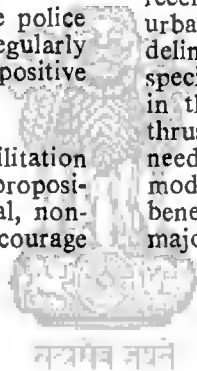
The above strategy shows that the rehabilitation of street children is a long drawn and difficult proposition. Above all, it requires a non-conventional, non-institutional approach. Government must encourage

voluntary organisations to set up free shelters to act as centres for them as suggested above. As indicated above, the social worker has to move at the pace of the child. Any quick and forced methods are calculated to fail. An environment of warmth, freedom and self-respect, will voluntarily attract these children who are independent and have already become earners.

All these interventions at micro level need to be encouraged and should be used as models which can be suitably dovetailed with a broad macro level strategy yet to be undertaken at the national level by the concerned Ministry.

Conclusion

The recommendations include both general and specific suggestions related to the urban social issues that have been discussed in the report. The general recommendations have been made with respect to the issues in development planning and change with a view to situating urban development in the context of social development. The specific recommendations relate to the effects of urbanization on some of the basic social institutions, such as the family and the community, as well as the key areas of social problems that have, recently gained prominence in the urban context, viz. urban tensions, drug addiction, adult crime, and juvenile delinquency and the problem of street children. The specific development models have not been elaborated in the report as they are well known. The overall thrust of the recommendations has been to stress the need for a paradigmatic shift from the old development model to a new development pathway which will be beneficial to the poor, urban or rural, who represent the majority in this country.



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APPENDIX-1

TABLE 4.1

Percentage Distribution of Households by various Types of Consumer Expenditure Classes in Urban Areas of India during the years 1951 and 1983

Type of Expenditure Class	Percentage of Households	
	1951	1983
Lower	31.76	39.13
Middle	6.37	12.07
Higher	61.87	48.80

Source : N. S. S. 1st and 38th Rounds on Consumer Expenditure Classes.

TABLE 7.1

Religious Distribution of Population of Indian Metropolises and Cities : 1981

City (M.C.)	Hindu	Muslim	Christian	Sikh	Buddhist	Jain	Other
Calcutta	85.2	13.4	0.7	0.3	—	—	0.4
Greater Bombay	69.3	14.7	4.7	0.6	5.6	4.1	1.0
Delhi	82.5	8.2	1.0	6.7	—	1.2	0.4
Madras	84.4	8.1	6.7	—	—	—	0.8
Bangalore	77.8	14.5	6.4	—	—	—	1.3
Hyderabad	59.4	37.6	2.4	—	—	—	0.6
Ahmedabad	78.9	14.8	—	—	—	4.7	1.6
Kanpur	75.8	20.6	0.7	2.1	—	—	0.8
Pune	76.9	9.3	3.6	0.6	6.9	2.3	0.4
Nagpur	71.5	9.3	2.0	0.6	14.7	1.1	0.8
Lucknow	68.4	29.3	0.7	1.4	—	—	0.2
Jaipur	77.7	18.1	0.4	0.5	—	3.2	0.1
Patna	85.6	13.0	—	—	—	—	1.4

Source : Census of India, Socio-culture Tables of various cities, 1981.

TABLE 7.2

Migrants by Place of Last Residence : 1971

Cities	Percentage of migrants to total Population	Percentage of migrants from the state to total migrants		Percentage of migrants from states other than those to which the city belongs	
		Rural	Urban	Rural	Urban
Calcutta	26.3	20.0	29.4	36.7	13.9
Greater Bombay	55.8	34.5	9.1	36.5	23.7
Delhi	45.6	0.7	5.2	44.8	49.2
Madras	36.0	35.4	41.2	8.1	15.3
Hyderabad	22.6	37.3	28.3	9.4	24.9
Ahmedabad	43.0	46.3	21.3	17.6	14.6
Bangalore	37.2	27.2	29.9	14.4	28.4
Kanpur	35.2	58.2	27.2	4.8	9.8
Poona	47.2	42.8	30.2	10.0	17.2
Nagpur	35.9	43.6	26.0	12.1	18.3
Lucknow	32.2	45.7	34.8	5.6	13.9
Jaipur	29.8	40.3	35.7	5.1	19.9
Patna	32.2	60.0	27.7	3.1	9.1

Source : Census of India, Migration Tables, 1971.

TABLE 8.1

*Estimated Proportion of Addiction to Brown Sugar to the Total Addiction in Selected Cities in recent years
(1982 Onwards)*

Cities	Proportion of addiction to Brown Sugar to total addiction
Bombay	99 per cent
Delhi	99 „
Calcutta	50 „
Imphal	100 „
Madras	50 „

Source : (SPARC) Society for Promotion of Area Resource Centre, 1985.

TABLE 8.2

Proportion of Drug Addicts in Total Population and in the Population of Specific Age-Groups in Selected Cities

Cities	Percentage of addicts in total population (1981)	Percentage of addicts in total population of 15—24 age-group
Greater Bombay (M. C.)	1.2	7.8 (1971)
Delhi (D. M. C. and N. D. M. C.)	1.9	7.9 (1981)
Calcutta (M. C.)	1.5	5.0 (1971)
Pune (M.C.)	3.3	14.2 (1971)

Source : Social and Cultural tables, Census of India, Delhi, Maharashtra and West Bengal, 1971 and 1981.

TABLE 9.1

Population and I. P. C. Crime in India in various years

Year	Estimated population in millions	Total cognizable crime under the I. P. C.	Crime per lakh population
1971	551.2	9,52,581	172.8
1975	600.8	11,60,520	193.2
1976	613.6	10,93,897	178.4
1980	663.6	13,68,529	206.2
1981	684.0	13,85,757	202.6
Percentage change in 1981 over 1971	+24.1	+45.5	+17.2

Source : Crime in India, 1981.

TABLE 9.2

Volume of I. P. C. Crime per Lakh Population in 12 States & 118 Cities of India, 1981

	Total volume of crime in 12 states	Volume of crime per one lakh population in states	No. of cities in the state with population of one lakh and above	Total volume of crime in 118 cities with population of 1 lakh and above	Vol. per lakh population in cities
1. Andhra Pradesh	75,294	140.5	12+ Hyderabad	10,435 + 6,870 = 17,305	327.98
2. Assam	43,797	220.1	1	2,045	N.A.
3. Bihar	1,07,006	153.3	10	16,508	659.61
4. Gujarat	78,639	231.6	6+ Ahmedabad	11,618 + 10,502 = 22,120	425.79
5. Karnataka	79,605	214.9	10+ Bangalore	9,862 + 17,122 = 26,984	509.76
6. Kerala	48,064	189.2	4	9,475	607.30
7. Madhya Pradesh	1,69,119	324.4	10	35,431	843.84
8. Maharashtra	1,72,976	275.8	14+ Bombay, Pune & Nagpur	18,300 + 35,263 + 5,750 = 67,344	407.75
9. Orissa	47,780	181.0	4	4,778	464.05
10. Rajasthan	67,052	196.6	6+ Jaipur	6,649 + 5,577 = 12,226	455.83
11. Tamil Nadu	1,18,471	245.3	16+ Madras	18,410 + 8,031 = 26,441	365.49
12. Uttar Pradesh	1,85,485	167.3	15+ Kanpur & Lucknow	68,082 + 5,882 + 10,291 = 84,255	1066.91
TOTAL	11,93,288		118	3,24,912	

Source : Crime in India, 1981.

TABLE 9.3

Total I. P. C. Crime, Rate of Crime (1961—71, 1971—81) and Population Growth in Selected Cities during 1961—71 and 1971—81

Cities	Total Crime			Growth of Crime		Population Growth	
	1961	1971	1981	1961—71	1971—81	1961—71	1971—81
Ahmedabad	3,436	3,060	10,502	-12.28	243.20	44.4	43.5
Bangalore	4,317	8,961	17,122	107.57	91.07	37.8	76.2
Bombay	19,379	25,066	35,263	29.34	40.68	43.8	37.8
Calcutta	14,161	10,911	13,951	-29.78	27.86	22.6	30.4
Delhi	9,883	26,933	29,341	169.78	8.94	54.6	56.7
Hyderabad	2,971	3,794	6,870	27.70	81.07	43.8	40.7
Kanpur	3,810	9,659	5,882	153.51	-64.21	31.3	32.4
Madras	5,686	7,205	15,693	26.71	117.80	63.0	34.9

Source : Census of India, 1971, 1981.

Census of India, 1961, 1971, 1981.

TABLE 9.4

*Total and the Rate of I.P.C. Crime Against Person and Property in Selected Cities during 1961—71, 1971—81**

Cities	Crime against person (Total)			Growth of Crime against person (per cent)		Crime against property			Growth of Crime against property (per cent)	
	1961	1971	1981	1961—71	1971—81	1961	1971	1981	1961—71	1971—81
Ahmedabad . . .	75	75	178	—1.3	140.5	2326	1692	3475	—37.4	105.3
Bangalore . . .	51	36	122	—41.6	238.8	3522	6576	11027	86.7	67.6
Bombay . . .	291	367	617	26.1	68.1	14671	16628	21218	13.3	27.6
Calcutta . . .	155	424	273	173.3	—55.3	7279	5722	8647	—27.2	51.1
Delhi . . .	236	611	1151	158.8	88.3	7573	19804	19661	161.5	—.72
Hyderabad . . .	40	49	101	22.5	106.1	2382	3129	4798	31.36	53.3
Kanpur . . .	97	263	470	171.1	78.7	2945	7503	5146	154.8	45.8
Madras . . .	44	43	146	—2.3	293.5	4414	4515	8912	2.2	97.3

*Population growth rate is shown in table 8.3.

Source : Crime in India of various years.





सत्यमेव जयते

SOCIAL INFRASTRUCTURE IN URBAN AREAS



OPERATIONS RESEARCH GROUP
BARODA-390 007



सत्यमेव जयते

PREFACE

With rapid increase in population of our cities, the level of urban infrastructure is fast deteriorating. Given the limited resources available with the urban local bodies, most of the capital investment programmes cover only basic services such as water supply and sanitation. Social infrastructure which includes education, health and recreation facilities have generally not been adequately provided. There is also dearth of information on the needs and utilisation of these services. Realising this vacuum, National Commission on Urbanisation has taken the initiative and sponsored the present study with Operations Research Group.

Major objectives of this important study are to identify the deficiencies in urban services, review the delivery mechanism and estimate the financial implications for the Eighth Five Year Plan period. The study has raised many organisational issues to do with the infrastructure of social services. These issues cover responsibilities of agencies concerned, the need for their coordination, control and monitoring and their integration in the overall urban development process.

While our thrust at Operations Research Group on urban studies continue, we consider this particular study as yet another endeavour in understanding the urban services delivery system. From ORG, the study was carried out by Mr Chetan Vaidya and Mr. K. Mukundan.

N. Bhaskara Rao





सत्यमेव जयते

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CHAPTER I

INTRODUCTION

Planning for social infrastructure in the context of urban areas has assumed greater significance in the context of the problem of urban poverty and need for equitable distribution of services among urban population at large. Inadequate finance is also an important consideration for fixing priorities as in case of all other urban services.

Unlike the basic urban services like water supply and sanitation, social infrastructure does not have a fixed connotation in terms of coverage in urban context. As a corollary, the role of State and Central Government, ULB and also non-government organisation varies in character from one area to another. These factors suggest the need for a close review of the type and coverage of various types of social infrastructure being provided in different types of urban area at the grass root itself. This will help to develop appropriate strategy at national level in consonance with urban development strategy as a whole and also other national level programmes like Minimum Needs Programme.

With this background, the National Commission on Urbanisation (NCU) has proposed this study both for the purpose of the review of the existing status with regard to provision of social infrastructure and evolving a strategy at the national level

1.1 Scope

Aspects to be studied are :

- (a) Role of State and Central Governments, ULB and also N.G.O.'s in providing these services;
- (b) Quick assessment of service level with particular reference to the access of the urban poor to these facilities and overall locational criteria;
- (c) Source of finance for meeting O & M expenditure and financing pattern of capital projects;
- (d) Existing maintenance mechanism for these facilities;
- (e) Relationship between the extent of provision for such facilities/infrastructure (and the resulting service level) and the type and size of urban areas;

- (f) Evolving certain norms with regard to provisions for such facilities in different types of urban areas and the financial implications for the same.

Various services which are considered under the term 'Social Infrastructure' are :

- (a) Education (e.g. Nursery, Primary, Secondary Schools and Colleges);
- (b) Health (e.g. Hospital, Intermediate Hospital, Nursing Home, Dispensary, etc.)
- (c) Recreation (Parks, Sports activity, etc.)

The emphasis in the study will be health, education, parks and playgrounds.

1.2 General Approach

As social infrastructure is generally a State subject, two representative states have been taken for detailed study. It has covered various aspects such as overall organisation, financial pattern, availability of facilities, process of planning and implementation, etc. For this purpose, it is decided that two metropolitan cities, a few medium and small sized urban area spread over in two states of *Tamil Nadu and Gujarat* will be selected. Analysis of *Delhi* situation will also be carried out to provide a comparative picture of Social Infrastructure in this city. No primary survey has been undertaken as a part of this study.

1.3 Present Report

The present report has been prepared with special reference to education and health sectors and other social infrastructure viz., parks and playground. These are the most important social infrastructure needed in the urban areas, where the role of public today is necessary. Details of case studies for Tamil Nadu and Gujarat, covering both metropolitan and non-metropolitan areas, are presented in this report. Certain conclusions and financial implications of the suggested norms for urban social infrastructure have also been presented. Issues which could not be dealt with adequately in the report given the scope and time have been also indicated. It is felt that this report will provide a good base for discussion on the future strategy and thereby enable NCU to formulate relevant policies at national level.

CHAPTER II

SOCIAL INFRASTRUCTURE IN THE CONTEXT OF SEVENTH FIVE YEAR PLAN OUTLAY

2.1 General

Seventh Five Year Plan visualises a long-term policy to solve the problems of poverty, unemployment and regional imbalances, by meeting the requirement of the mass by providing facilities accessible to them.

The success of a plan depends on development of human resources which is a precious endowment. Education skills and health play an important role in development of human resources and this requires provision for social infrastructure. The step identified in this regard is to correct imbalances prevalent in the system of delivery of health care and education.

Social infrastructure as covered by Seventh Five Year plan includes education, health, family welfare, water supply and sanitation. The plan's allocation for social infrastructure is 16% and the corresponding figure for Gujarat and Tamil Nadu is 24% and 36%. At the central level allocation for the major components of social infrastructure, namely Health, Education, Water Supply and Sanitation is 12, 22 and 22 per cent respectively. Further it should be noted that 11% is for centrally sponsored family welfare schemes.

The investment with reference to social infrastructure indicates an equal share of investments in education water supply and health (inclusive of family welfare) but the thrust is towards rural areas so as to achieve a balanced development.

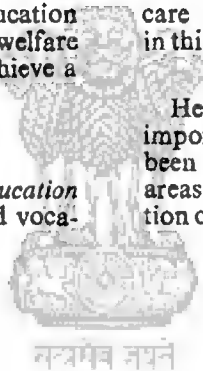
2.2 Strategy

The seventh plan's thrust with regard to education is in terms of universal elementary education and voca-

tionalisation of secondary education as far as the lower levels are concerned. As regards the higher level apart from restructuring undergraduate courses, stress is on a multi-disciplinary approach to research supported by technological improvement. The plan aims at improving the quality of education, but it should be noted that except for a balanced development there is no specific emphasis on education in *urban areas*. The sectoral paper on health aims at achieving health for all by 2000 AD and is expected to achieve by way of *primary health care services* (MNP) by improving units and rational allocation of beds in district centres. In addition the stress is on the role of voluntary agencies at the same time bringing about intersectoral coordination and by application of latest bio-technology in health care. But the major emphasis appears to be in the areas of an effective and efficient Management Information System (MIS) for proper planning, implementation and evaluation of health services.

The plan has made a mention of problems of *health care in urban areas*, the problems appears to be in terms of *multiplicity of agencies lacking co-ordination*, thereby leading to duplication and ineffectiveness of services. In addition slums continue to pose a problem to health care and slum improvements have been visualised in this context.

Health and education delivery system have been given importance at the regional level. Little emphasis has been given to management of these services in the urban areas. This calls for a closer look at planning and operation of the delivery system in the urban areas.



CHAPTER III

SOCIAL INFRASTRUCTURE IN URBAN AREAS

3.1 Introduction

India being a welfare state the government is committed to the overall well being of the people in terms of physical, social and mental development, an important input in this regard is provision of education and health facilities. This section provides an overview of health and education at national level and subsequent sections treat the same at urban area level.

3.2 An overview of Health and Education

Education is an important input for manpower development and this is one of the thrust areas of national plans. The proportion of student population based on 1981 figures is estimated to be 15.3%. Levelwise figures indicates that the proportion of primary students is 70%, middle school student is 19% and 11% in high/higher secondary classes. The levels of services indicate, that there are 3.6 primary schools/5000 population and 2.5 secondary schools per 10000 population. The levels of services appear satisfactory. The disaggregated picture indicates that the levels of services for primary school ranges from 1.64 in Gujarat to 14.7 in Meghalaya. For secondary the range is from 1.58 in Gujarat to 5 in Maharashtra, Manipur and Gujarat. In terms of expenditure per student, the national average is Rs. 25 and the ranges is from Rs. 13 in Bihar to Rs. 109 in Nagaland. The figures may not provide a correct picture because disbursement of funds depends on the outlay. This also needs an analysis of plan and non-plan outlay (Annexure 1) and its basis.

Health is defined as the state of complete physical, mental and social well being. An indicator in this regard is number of beds/1000 population is 0.9. This figure is likely to be biased given the fact that this pertains to information available only from hospitals who have submitted their returns. The role of private sector is not reflected fully. In terms of expenditure per capita the national average for 1982/83 is Rs. 25 and the disaggregated figure indicates that it ranges from Rs. 13 in Bihar to Rs. 74 in Meghalaya. Exceptional state is (Rs. 109). Here again the same argument holds good in the case of education.

The national estimates presented do not indicate state level urban rural information, which is one of the faster for initiating such a study at an urban level. The successive sections deal with this at an urban area level.

3.3 Health Care

3.3.1 Background

Public Health is an obligatory function of the urban local bodies and covers both preventive and curative aspects. Investments in these two aspects of health care are mainly to meet the requirements of the urban poor. In addition to the preventive and curative aspects the land use plan aim at health, safety and convenience, achieved by regulation of activities.

The location of facilities as per norms laid down by Town and Country Planning Organisation and Master Plans are in view of access and space requirements. These norms are based on population criteria. The meaning or usefulness of such standards has to be viewed in the context of the *multiplicity of agencies in health care delivery* with each agency having its own norms. More important, most of these agencies operate at *State level* and except in a few cases, there is *no separate planning for urban areas as such*. In this context, the approach of this section is in terms understanding the *operation of the system* of health administration with reference to States of Tamil Nadu and Gujarat. In addition it provides an insight into the *planning and financing pattern* of the agencies involved and their problems.

3.3.2 Tamil Nadu

3.3.2.1 Agencies

In the context of urban areas in Tamil Nadu two state level public agencies are involved in provision of health services. These are namely, (a) Directorate of Medical Education (DME), and (b) Directorate of Medical Services and Family Welfare (DMS & FW).

Their functions are :—

- | | |
|--|--|
| (a) Directorate of Medical Education | Imparting Medical education and controls the function of teaching hospitals in Madras, Madurai, Coimbatore, Thanjavur and Tirunelveli. |
| (b) Directorate of Medical Services and Family Welfare | Controller of ESI and Hospitals in areas not controlled by DME—with a District Medical Officer in each district headquarter. |

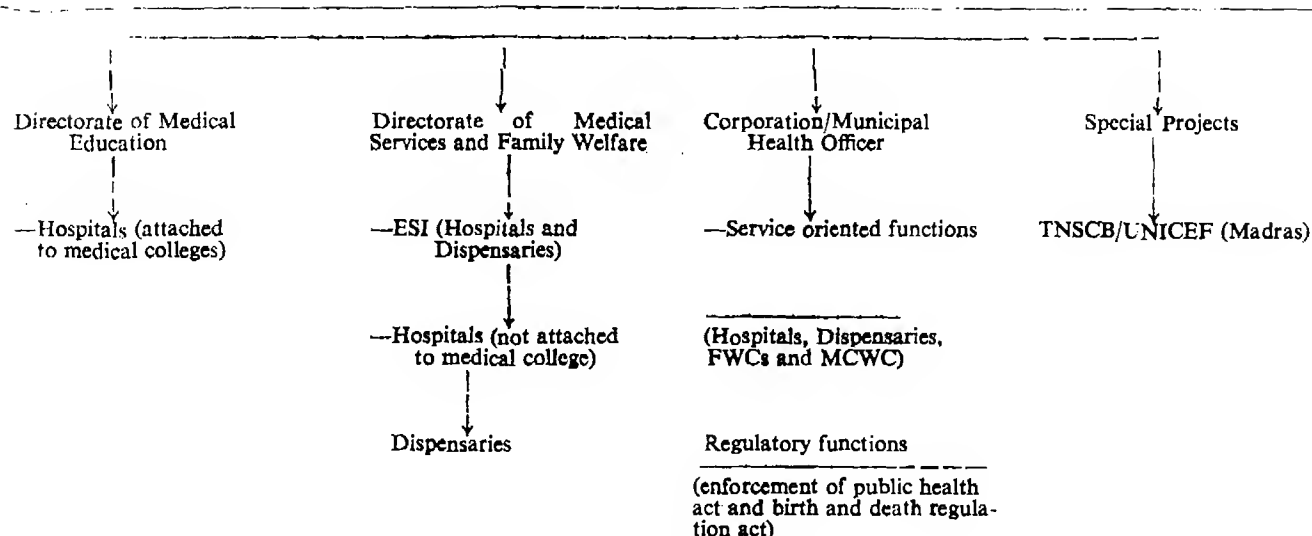
Urban local bodies are responsible for enforcement of public health act and primary health service. In addition there are some special health projects under agencies such as TNSCB/UNICEF (Fig. 3.1).

Background information regarding role of each of these agencies in health delivery system in *Madras Corporation area* is given below :—

Directorate of Medical Education (DME)

DME under department of health maintains 18 hospitals and 10 dispensaries in Madras city including King Institute. In addition, there are 3 medical colleges under which all hospitals and dispensaries function. These hospitals carry out the functions of teaching and health care headed by the Dean and assisted by the Superintendent in matters of health care and Vice Principal in Academic matters. In addition there are 6 Assistant Directors assisting DME in matter relating to hospitals, research, etc.

FIG. 3.1 : Public Health Care System for City



ESI—Employees State Insurance

FWC—Family Welfare Centre

MCWC—Maternity and Child Welfare Centres

TNSCB—Tamil Nadu Slum Clearance Board

DME as such has no locational norms and requirements are based on beds per 1,000 population. The requirements are sent to the Director General of Public Health and decision is based on availability of funds. The discussions with DMS and FW indicated that the ratio is a bed per 250 population.

The current coverages of DME hospitals is one bed per 400 population. In terms of coverage per doctor it is 510 inpatients and 18300 outpatients per doctor. This figure appears alarming but it should be noted that diagnosis is also carried out by student practitioners.

Total expenditure of DME in the year 1984-85 in the city was Rs. 36.73 crores. Details of this expenditure are presented in Table-3.1.

Employees State Insurance (ESI)

ESIC act was enacted in 1948 to provide benefits to employees in the event of sickness, maternity and employment injury to employees in registered factories (income below Rs. 1,600). In Madras there are 2,72,400 insured persons covered as a part of this scheme.* ESI maintains (under DMS&FW) two hospitals and 23 dispensaries in the city. The bed strength is 831 assisted by 28 doctors in hospitals and 154 doctors cover, 23 dispensaries.

ESIC appears to be the single agency following locational norms. Dispensaries are located in areas where there are a minimum of 1,000 insured persons. Additional doctors or nurse is based on the same number of insured persons. There are special provisions in terms of reservations in Government hospitals and specialist consultations.

TABLE—3.1 : Directorate of Medical Education Expenditure on City Hospitals—1984-85

Item	Percentage to total			
	Non-Plan		Plan	
	Revenue	Capital	Revenue	Capital
Medical Education	19.16	1.14	26.60	13.60
Teaching Hospitals	63.36	98.86	47.48	78.32
Health Program	6.80	—	15.27	0.39
Training	0.71	—	2.13	7.69
Lab Services	2.79	—	7.43	—
Direction	2.18	—	0.84	—
Social Welfare	—	—	0.25	—
Total	100.00	100.00	100.00	100.00
(Rs. in lacs)	3488.5	8.6	26.3	149.7
Total (Rs. in lacs)	3497.1		176.0	
TOTAL (Plan+Non-Plan)	3673.1			

Current coverage is in terms of a bed per 328 insured Persons. In addition a doctor per 1,500 insured persons. is considered to be sufficient in terms of coverage.

Madras Corporation

Health care in local bodies are undertaken by public health department under the Directorate of Public Health and Preventive Medicine, the exception being three Corporations of the State where this function is under independent charge of Medical Officer.

The activities of public health department encompass various dimensions including conservancy of roads, solid waste disposal, industrial licencing to health care. In Madras Corporation conservancy is take care of by Engineering Department. Health department takes care of preventive and curative aspects. Basically the two functions are *regulatory* and *service oriented*.

Regulatory function involves enforcement of acts (i) Municipal Corporation Act., (ii) Public Health Act, (iii) Public Facilities Act, (iv) Birth and Death Regulation Act. The service oriented activity involves control of communicable diseases, immunisation and prevention by maintenance of public spaces like burial grounds, markets, etc.

The health office maintains three aspects of health care (i) Maternity and Child**health, (ii) Family Welfare Measures**, (iii) General health care each under a medical officer including an epidemiologist.

- M&CW Services are provided by 44 centres, in addition Anti and Post Natal Care, Child Care measures are undertaken.
- Family Welfare measures are conducted by welfare centres number 32 under the District Family Welfare Medical Officer. This a centrally sponsored scheme.
- Primary health care is provided through 70 centres with 342 beds CD hospital (communicable diseases) Programmes relating to control rabies, malaria, filaria, prevention of adulteration and inspection of corporation school children are carried out by public health office. This department is supported by clinical laboratory services (12 labs). There is absolutely no link between DME and Corporation.

Corporation has no specific locational norms, but it is believed that facilities are located in predominantly lower income areas. Population norms are followed only in case of location of family welfare centres. On an average each dispensary treats 100 patients a day.

Other Urban Local Bodies (ULBs) of Small Urban Area

A study on health services was made for selected towns in Madras Metropolitan Area (MMA). The types of services provided by ULBs are similar to that of Corporation in terms of service and regulatory functions. Their function is supervised by health officer, whose additional charge includes conservancy and solid waste management. The health offices function is controlled by

PH Department. This aspect of waste management is taken care of by the public health/engineering department in the Corporation.

The local bodies offer three types of primary health services namely (i) General health care, (ii) Family welfare measures, and (iii) Maternity and child care. Table 3.2 presents availability of various health facilities in 8 selected urban local bodies of Madras Metropolitan Area (MMA). Per capita annual expenditure on health is Rs. 12 only.

Tamil Nadu Slum Clearance Board (and Department of Health and Social Welfare)

This programme is jointly undertaken. Voluntary agencies are also involved in provision of health care. This programme is a part of World Bank funded MUDP-I. The target group is Mothers, and Children below 6 in improved slum areas. This covers immunisation and primary health care services. Total allocation is Rs. 90 lakhs.

Private Agencies

In addition to all the public sector agencies mentioned earlier, there are about 300 private hospitals/clinics and 4000 private practitioners in Madras city. They do not have any locational norm. They are also not controlled by DME, DMS and local bodies. Any registered practitioner can start functioning by hanging a Board.

TABLE 3.2 --- Health Facilities provided by selected Urban local bodies of Madras Metropolitan Area

Towns	Population in '000 (1981)	FCWC	MCWH	Hospital/Dispensary
Tambaram	86.9	1	—	—
Pellavaram	83.9	3	—	—
Alandur	97.4	2	2	—
Thiruvottiyur	134.0	2	1	1
Madhavaram	32.8	2	—	3
Kathivakkam	22.1	1	—	—
Ambattur	115.9	3	1	1
Avadi	124.7	3	—	1
TOTAL	697.7	17	4	6

3.3.2.2 Financing Pattern

The financing pattern of health care can be grouped into self-financed agencies like ESI with a contribution of Rs. 3.10 crores generated by 2.25% contribution by employees and 5% from the employers at an average of Rs. 114 per insured person. ESI apart from meeting benefits contribute to medical care (The state government contribute one-eighth of medicare expenses). DME on an average spends Rs. 47 crores annually for the state as a whole and this is met by Government contribution in the form of plan and non-plan grant. Corporation's expenditure accounts for 15% of budgetary (Rs. 36.35 lakhs) allocations. Primary health care, operation and maintenance of dispensaries is met by the Corporation from its own funds. The expenses on family welfare are met by Corporation from its funds and reimbursed periodically from Government of India on production of Audit Certificate, as this is a centrally sponsored scheme.

*Assuming a family size of 5 total coverage in case of medicare works out to 1.36 million as against metro population of about million.

**Apart from Corporation, teaching hospitals also provide such facilities.

Health care under MUDP was funded by Government of Tamil Nadu (78%) and IDA (22%) with IDA contribution directly transferred to the budgets of Department of Health.

3.3.2.3 Service Levels

Three measures of service levels have been recognised (i) distribution (access), (ii) beds per 1000 population and (iii) coverage. A study carried out on health care in Madras indicated a concentration of dispensaries in northern and central Madras and very few in southern Madras. The historical perspective of public and ESI hospitals brings out that hospitals have expanded without coverage in effect bringing out the locational importance. However, coverage need not be location specific in an urban area where *accessibility* is high given a good network of public transport system.

Service level in terms of beds indicates that in Madras city, there are 11,074 beds in government and 5269 in private hospitals. The current ratio is 1 bed per 220 population (Table 3.3) higher than DMS & FW norms of 1 bed per 250 population. The deficiency is not much except in the area within MMA (Table 3.4).

Service levels in selected small and medium urban centres of MMA is presented in Table —3.4. Situation is far from satisfactory. This is reflected by a coverage of 0.34 *bed for every 1000 population* as against 1 bed per 220 persons in Madras city. In addition there are only 5 MCWH homes for 9 lakh population, in effect signifying a MCWH home per 1.8 lakh population against Madras Corporations standard of 1 per 50000 population.

The service level index in terms of bed/1000 or similar indicator is not satisfactory as this does not reflect the consumption level. The concept of 'social consumption' is relevant but at the present stage of information availability it is difficult to contribute any such index.

At this stage it is difficult to estimate *coverage*, but the multiplicity of agencies without co-ordination or control, especially when the public agencies take decisions independent of other considerations certainly indicates overlapping. Though all three public agencies DME, ESI and ULBs provide services to the poor, the tendency of overlapping is very high. This also in terms of expenditure for example three agencies serve in Madras namely DME, ESI and ULB wherein the variation is wide (Table 3.6).

TABLE 3.3 — Service Levels—Health Care in Selected Local bodies of Tamil Nadu—1985/86

	Madras	Coimbatore	Trichy
(a) No. of Hospitals			
DME	16	1	1
ESI	2	1	—
ULB	1	—	—
(b) Beds			
DME/Govt.	9,901	971	573
ESI	831	500	—
ULB	342	—	—
TOTAL (b)	11,074	1,471	573
(c) Beds : Population	1:305	1:513	1: 632
(d) Private Hospitals	300	56	43
(e) Beds	5,269	1,736	958
TOTAL Beds (b+e)	16,343	3,207	1,531
(f) Beds : Population	1: 220	1:235	1:251

TABLE : 3.4—Some Indicators of Health Service Levels in Selected Urban Centres of MMA

	Doctors	Beds	Beds/1000 Popul.
Tambaram	7	—	—
Pallavaram	30	137	1.30
Alandur	3	19	0.20
	40	156	0.48
Thiruvottiyur	18	10	0.06
Madhavaram	10	11	0.28
Kathivakkam	1	6	0.24
	29	27	0.11
Ambattur	1	5	0.03
Avadi	26	126	0.81
	27	131	0.41
TOTAL	96	314	0.34

TABLE—3.5 : Financing Pattern for Health Care (Rs. in Crores)—Madras City

	Self generated	State grants/ budgetary allocation
ESI (DMS & FW)	3.41	1/8th of medical treatment
Corporation	—	0.37
DME	—	53.39
TNSCB	—	(state as a whole) 0.59

TABLE : 3.6—Expenditure Pattern

	No. of In-patients	Exp./in-patient
Madras		
DME	3,41,278	978.00
ESI	24,675	556.00
ULB	3,400	458.00
Coimbatore		
DME	58,121	583.00
ESI	10,180	752.00
Trichy		
G.H.	52,947	727.00
Alandur	—	—

Expenditure Per capita on Public Health

ULB	Expenditure Per capita* on Public Health	Health as % to total expenditure
Madras	15.67	14.00
Coimbatore	8.26	26.00
Trichy	7.83	33.00
Alandur	5.63	19.00

*3 years average

3.3.3 Gujarat

3.3.3.1 Agencies

In Gujarat State, there is only one agency to coordinate various health activities. This agency is Directorate of Health, Medical Services and Medical Education (DHM). In addition, there is a Director of Medical Services solely responsible for the Employees State Insurance (ESI) scheme. All Urban Local Bodies are responsible for enforcement of public health act and some of them also provide primary health services. In addition, there are some special health projects under Integrated Child Development Scheme and Family Welfare Programme.

In the urban areas of the State, there are about 31,000 beds and most of them are in the government hospitals (41%) (Table 3.7). It is interesting to note that 17% of the beds are in Charitable Hospitals.

TABLE : 3.7—Distribution of Hospitals and Beds in Urban Areas of Gujarat

Type	Hospitals	Beds	
		%	No.
Government	97	41	12,630
Local Bodies	55	13	4,064
Charitable Trust	102	18	5,492
Private	584	28	8,789
	838	100	30,975

SOURCE : Directorate of Health & Medical Services, Ahmedabad.

(a) Directorate of Health, Medical Services and Medical Education (DHM)

As the name of the agency suggests, it is responsible for Health, Medical Services and Medical Education. It has three major branches. Functions of the three branches are given below :

Branch	Functions
(i) Health and Medical Services	(a) provide preventive and curative medical services in the state. (b) look after Family Planning, ICDS and other special programmes.
(ii) Class I & District Hospitals	General administration and to provide all types of health and medical facilities through these hospitals.
(iii) Medical Education	Carry out medical education in the state from four medical college.

This agency is responsible for managing about 97 government hospitals in the urban areas of state and four medical colleges. It is also responsible for sanctioning and releasing grant for various programmes such as National Malaria Eradication, Family Planning ICDS, etc.

There are no specific norms for number of beds and doctors in the urban areas of the state.

Employees State Insurance (ESI)

Coverage of employees under this scheme is similar to Tamil Nadu State : In Ahmedabad, there are 3,42,000 Persons covered as part of the scheme. It maintains three hospitals and 52 dispensaries in Ahmedabad. The total bed strength is 1150 beds. Current coverage is in terms of a bed per 297 insured persons. In Baroda there is one hospital and eighteen dispensaries.

ESI appears to be the single agency following certain norms.

Ahmedabad Municipal Corporation

A separate Dy. Commissioner (Health and Hospital) is incharge of the public health department of the Corporation.

This is the only urban local body in the state which maintains its own public hospitals (Table--3.8). In other urban areas this function is solely provided by the state government hospitals. AMC has not established any new dispensary in last two decades so norms for health facilities are not relevant.

TABLE—3.8 : Health facilities provided by selected ULBs of Gujarat

	Municipal Corporation			Municipality	
	AMC	BMC	RMC	Gondal	Dahod
Hospitals	✓	X	X	X	X
Maternity Homes	✓	✓	✓	X	X
Dispensary	✓	✓	✓	X	X
ICDS	✓	✓	✓	X	X

AMC—Ahmedabad Municipal Corporation

BMC—Baroda Municipal Corporation

RMC—Rajkot Municipal Corporation

✓ Activity carried out by the ULB

X—Activity not carried out by ULB

Baroda Municipal Corporation (BMC)

Public Health Department of the (BMC) is supervised by Dy. Commissioner (General). It has following branches :

(a) Health Officer	General Sanitation Compost Births & Death Market & Slaughter house International certificate
(b) Family Welfare/ Medical Officer	Family Welfare, Medical relief for staff and Public & Health Education
(c) Dy. Health Officer	Immunisation, Malaria and I.C.D.S.

For General public following health facilities are provided by BMC :

1. Health Centre

Maternity Homes—24 beds
Ante-Natal & post-natal care
Child care
Dental care

2. Dispensary

Full-time—2
Part-time—7
Mobile—2

3.3.4 Financing Pattern

For general health programme the municipal corporation and other ULBs do not get any financial assistance from the state government. All expenditure is borne by the ULBs. I.C.D.S. and Family Welfare are state Government programmes. Full grant is given by the state government for these programmes.

Total expenditure on public health in Baroda for the year 1986/87 was about Rs. 268 lacs (Rs. 32 per capita). Annual growth rate of this expenditure was 16 per cent during last three years. In Ahmedabad total health expenditure in 1986/87 was about Rs. 971 lacs (Rs. 35 per capita).

TABLE-3.9 : Expenditure on Public Health-Baroda and Ahmedabad Municipal Corporation

Year	Total (Rs. in lacs)		Per Capita (Rs.)	
	Baroda	Ahmedabad	Baroda	Ahmedabad
1983/84	181.66	735.34	22.6	27.2
1986/87	267.68	971.36	31.8	35.3
Annual Growth Rate (%)	16	11	13	3

3.3.5 Service Level

Number of beds per thousand population has been taken as index of service. In Ahmedabad and Baroda districts (urban) there are more than two beds per thousand population. Whereas it is only one bed per thousand population in Rajkot which is very low (Table-3.10).

The higher service level in Ahmedabad and perhaps in Baroda should be judged against the fact that these cities serve population residing outside.

TABLE-3.10 : Some Indicators of Service Level in Selected Centres of Gujarat

District (Urban)	Estimated Population (1987)	No. of hospital	No. of beds	No. of beds/1000 population
Ahmedabad	32.8	184	7,276	2.2
Baroda	11.2	37	2,172	1.9
Surat	11.8	60	2,729	2.3
Rajkot	10.2	88	1,000	1.0

3.3.6 Health Facilities in Delhi

As in case of Madras, Delhi health facilities have to serve the city as well as adjoining areas. At present, Delhi has about 15,000 hospital beds* at the rate of 2.6 beds per 1000 population. This is lower than the corresponding figure for Madras (2.9). Similar to

Madras city, there is geographical imbalance in different planning divisions of health facilities. Three planning divisions in Delhi have less than one bed per 1000 persons.

Earlier, Delhi had a two-tier system in the form of general hospital and health centres. This has not satisfied the full requirement of health needs. Now a six-tier system has been proposed. The proposed system and its norms are given below :—

Type	Beds	Population Norm (lacs)
(a) General Hospital	500	3.00
(b) Intermediate hospital (A)	200	1.00
(c) Intermediate hospital (B)	80	1.00
(d) Poly-Clinic	—	1.50
(e) Nursing Home, CW & MC	—	0.50
(f) Dispensary	—	0.15

*Based on Master Plan for Delhi—2001, DDA, 1985.

It may be mentioned here that a four tier system already exists in Madras. Recommended beds per 1000 population in Delhi is five which is higher than the planning norm in Tamil Nadu which is 4 beds per 1000 persons.

3.4 A Comparative View of Gujarat and Tamil Nadu

Comparative study of Gujarat and Tamil Nadu shows that in Gujarat there is only one agency to co-ordinate various activities of health whereas there are two in Tamil Nadu. Level of health service in urban areas of Gujarat is relatively better than Tamil Nadu state. Unlike Tamil Nadu state ULBs are not maintaining any hospitals (except Ahmedabad Municipal Corporation). This service is provided by the State Government.

While direct comparison in terms of expenditure on health care in the urban areas in the two states has not been possible, it is evident that budgetary allocation for public health in Ahmedabad and other large urban areas in Gujarat is much more than in Tamil Nadu.

Total expenditure of Rs. 9.7 and 2.7 crores in Ahmedabad and Gujarat respectively and public health is significantly higher compared to its population size. Per capita annual expenditure on health in Gujarat is between Rs. 32 to 35 where it is between Rs. 12 to 22 in Tamil Nadu. This is experienced more by stronger financial base of corporation in Gujarat. It may be mentioned here primary health care is responsibility of the ULBs in both the states. There is no grant from the state government programmes such as family welfare, child care and nutrition. In terms of providing higher level health services and medical education, Ahmedabad is unique among the ULBs studied.

This points to the need for examining the feasibility of extended role in health sector for ULB in consideration of financial and organisation strength of municipal bodies.

CHAPTER IV

EDUCATION

4.1 Tamil Nadu

4.1.1 Agencies

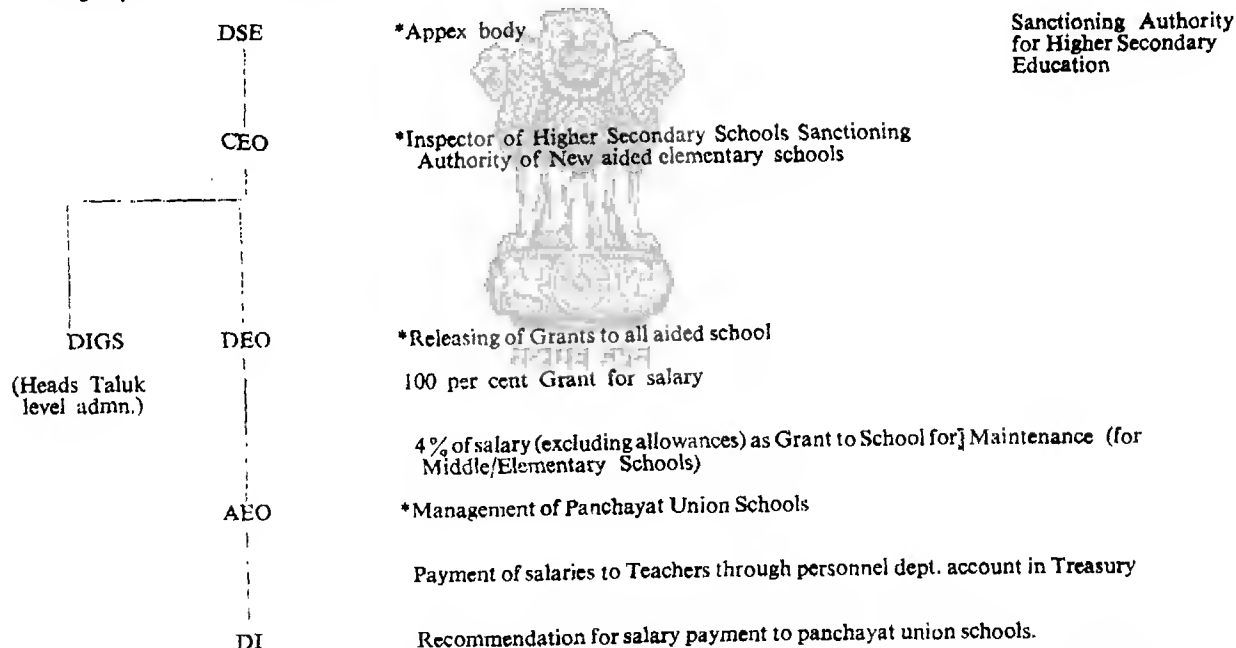
Unlike health sector, delivery of education facilities is more organised. As most of the educational institutions depend for financial assistance from Government, the *public sector* is playing the key role in this aspect. For the sake of analysis education has been divided into two levels, the lower level consisting of school education and the higher level consisting of collegiate and technical education. Various State and Central Government agencies involved in the education are :

- LOWER LEVEL**
- (i) Directorate of School Education (DSE), Control of Schools recognised by Tamil Nadu State Board.
 - (ii) Central Board of Secondary Education (CBSE), Control of CBSE Schools (K.V.S.) conducts examination.

HIGHER LEVEL

- (i) Directorate of Collegiate Education (DCE), Administration of Government and aided colleges (Arts and Science), in terms of release of salary grants (100%) and maintenance grants (80%) of expenses.
- (ii) Directorate of Medical Education (DME), Administration of Medical Colleges and Hospital-cum-Colleges including health care delivery.
- (iii) Directorate of Technical Education (DTE), Administration of Engineering Colleges and Technical Institutions.

FIG. 4.1 Organisation and Functions
Agency Function



NOTE :— In case of Government Schools the Headmaster is the payment authority who draws directly all payments from the Treasury.

The emphasis of this section is on basic education because higher education has no direct relevance to location or standards.

General Education

It appears that location decisions are governed by procedures wherein the intending agency will have

to provide details regarding general characters of the area, school plan and locations of schools in that area, approval is granted after scrutiny. School education appears to be organised but location decision does not appear to be adhered to. In addition local authorities sanction is subject to approval of DSE. The local authorities apart from approval have no

role to play in terms of location decisions. In addition it is believed that in case of Government schools space standard is waived, the same appears in case of CBSE schools especially in terms of open space for play ground. In general observations indicate inadequate space for play fields.

4.1.2 Role of Urban Local Bodies

The overall control of school education including financial and sanctioning in urban areas is through DSE as true for the state as a whole. However, the three Corporations and other Municipal bodies in the state play a more direct and effective role so far as primary and middle school is concerned. However, the extent of coverage (in relation to population) and role of non-Government sector is different from one urban area to another.

Madras Corporation provides elementary and higher secondary education through a network of 368 primary and middle schools and 35 high/higher secondary

schools (Table—4.1). These institutions cater to the lower income households and location decisions are based on concentration of these households. These institutions are under the control of a special officer, but are governed by DSE rules and regulations. Location decisions are based on availability of land and funds. Revenue and expenditure on Elementary Education by Madras Corporation is presented in Table—4.2.

In the ten local bodies of MMA there are 108 primary, 31 middle and 39 higher secondary schools. The local bodies/Government maintain 58 primary, 8 middle and higher secondary schools. The rest are aided schools. The planning and locational decisions are governed by DSE and institutions under local bodies are independent in terms of locational decisions but have to follow up the registration process.

The teachers-students ratio in the Municipal Corporation schools is 37 which is good compared to corresponding figure of 52 in the schools of Townships/Municipalities of MMA (Table—4.3).

TABLE—4.1 : Number of Educational Institution Maintained by Madras Corporation—1984/85—Madras Corporation Area

Type of Institution	No. of Institutions	No. of Students	No. of Teachers
1. Primary School and Middle School	368	156,500	4,135
2. High School and Higher Secondary School	35	33,500	985
TOTAL	403	190,000	5,120

SOURCE : Madras Corporation.

TABLE —4.2 : Revenue and Expenditure for Elementary Education —Madras Corporation

	1983-84	1984-85	1985-86	Aggregate
No. of Institutions	365	368	369	367
No. of Students	1,55,660	1,56,080	1,56,500	1,56,080
Revenue (Rs. in Lacs)	699.02	831.65	1,089.19	873.29
Expenditure (Rs. in Lacs)	699.02	831.65	1,089.19	873.29
Expenditure/Students (Rs.)	449.00	552.00	696.00	560.00

TABLE—4.3 : Teachers Students Ratio*—Urban Local Bodies Schools in Madras Metropolitan Area

Local Body	Primary & Middle	High & Secondary	Total
Townships/Municipal Bodies	53	52	52
Madras Corporation	38	34	37

*Student per teacher.

4.1.3 Financing Pattern

Education is a State subject, though it is included in the concurrent list. The Central Government's role begins from secondary level, but it is crucial in higher education and research. Majority of institution is funded by State Government and allocation is at state level. For the aided schools, 100% of salary is given as grant. A fixed percentage of salary is given as grant for maintenance expenditure. Region (urban area) wise funding and expenditure details are not separately planned and maintained. Education being a controlled subject, emphasis should be on the process and norms, as allocations are based on it. The only agency with self-generating source

is the local body whose contributions to education are in the form of 5% of the property tax and 24% of the budgetary allocation.

As of Universities fundings si from State UGC and Government of India in the form of Grants. An analysis of the same will not be significant as their coverage is regional and not specific to urban area.

4.1.4 Service Levels

At present there are three agencies catering to the needs of the population, schools under corporation/government, private bodies and public sector undertakings controlled by two boards State and Central Board.

In Madras City there are 411 higher secondary schools (340 state schools and 69 CBSE schools), indicating a ratio of a school per 9,000 population. This is higher than National Building Research Organisations, norms of a school in a zone with a population of 16,000. the coverage is higher than the standards even at lower level as there are 256 secondary and 379 primary schools. Further all higher secondary schools offer secondary education too.

Distributional aspect of school education indicate that the distribution is balanced between North and South Madras (MMDA : 1985). This observation does not include CBSE schools or KVS schools. As of KVS schools location is decided by the intended public sector undertaking, but CBSE schools concentration is higher in Southern Madras. The general conclusion is that

extent of facilities appear to be balanced.

However, as far as small and medium towns around Madras city is concerned the education service levels is far from satisfactory (Table—4.4). There is only 0.56 Primary School per 5000 population and only 0.40 high school per 10000 population (or 1 school for 25,000 population).

TABLE—4.4 : Distribution of School Facilities by Type in the Selected Centres of MMD

	Primary School	No. of Primary Schools/ 5000 population	Middle School	No. of Middle Schools/ 7000 population	High School and Higher Secondary Schools	No. of High/Higher Secondary Schools/ 10000 population	1985 Population in '000
Alandur	14	0.57	5	0.29	4	0.33	116.7
Pallavaram	4	0.18	5	0.32	7	0.63	105.1
Tambaram	8	0.37	6	0.39	7	0.55	103.4
Thiruvottiyur	10	0.28	1	0.04	5	0.28	167.0
Kathivakkam	7	1.32	1	0.26	—	—	25.1
Madhavaram	14	1.65	2	0.33	1	0.24	40.0
Manali	3	0.99	—	—	1	0.66	14.2
Ambattur	24	0.68	4	0.15	4	0.23	162.2
Avadi	18	0.54	5	0.15	10	0.60	155.1
Thiruverkadu	6	1.50	2	1.75	1	0.50	19.4
TOTAL	108	0.56	31	0.22	39	0.40	908.3

In terms of actual expenditure on education also, the service level is not satisfactory. As revealed from Table-4.5, per capita annual expenditure on education (by ULB) varies from Rs. 7 to Rs. 17 (except for Kathivakkam which is an exception in terms of industrial and financial base).

TABLE—4.5 : Expenditure on Education by Local Bodies in MMDA (Average of 1980/85)

Town	Population (1981)	Annual Average Expenditure (Rs. Lacs)	% Expenditure to Total Current Expenditure	Per Capita Expenditure (Rs.)
1. Alandur	97,449	15.18	32.5	15.6
2. Pallavaram	93,901	8.92	24.9	10.6
3. Tambaram	86,923	5.86	15.6	6.4
4. Thiruvottiyur	134,014	10.36	19.9	7.7
5. Madhavaram	32,767	3.82	30.3	11.6
6. Kathivakkam	22,101	5.33	20.2	24.1
7. Ambattur	115,901	8.35	16.9	7.2
8. Avadi	124,701	21.42	45.4	17.2

4.2 Gujarat

4.2.1 General

Two agencies responsible for co-ordinating the school education activities in the state are:

- Directorate of Primary Education and
- Directorate of Higher Education

Directorate of primary Education is responsible for Primary Education in the state whereas high School and College Education is responsibility of the Directorate of Higher Education.

4.2.2 Primary Education

Though there are 55 municipality and municipal corporations in the State only 31 of them have taken up the responsibility of Primary Education. In remaining urban areas this responsibility is taken up by Taluka/District Panchayat. Among the private schools, there are two categories, schools which avail of government grants and those who do not. Thus primary schools in the urban areas are of following four types:

- Schools managed by ULBs
- Schools managed by Taluka/District Panchayat
- Private schools availing grants and
- Private schools not availing grants

In each of the ULB who have accepted the responsibility of managing the primary education, there is a Town/City Primary Education Samiti (Committee). This Samiti manages the primary education and is headed by an Administrator. All private schools avail grant or not, have to get recognition from this Samiti.

For starting new schools, the Samiti first identifies utilisation of present classroom/schools in the area. Based on this assessment it recommends to Municipal Commissioner for sanctioning a new school. Commissioner in turn, has to obtain the approval of the General body of the ULB.

In urban areas, where ULB has not taken the responsibility of primary education, the Taluka Panchayat, Education Committee takes the responsibility of managing the schools. This Committee includes Taluka development officer, Education Extension Officer and President of the Taluka Panchayat. For starting new schools it considers following factors:

- Request from Nagar Panchayat or Municipality,

- (b) Number of students by sex and age, and
(c) Whether initially the ULB will provide some space for the school.

As far as private primary schools are concerned only a trust can apply for a managing a school. Application is made to Directorate of Primary Education through local office. Views of the District official are taken into consideration while giving permission to start the school.

As per the norms, there should be one teacher per 40 to 50 students. The distance of two primary schools should not less than one Km. In slum areas, even if there is a class of 10 to 20 students on teacher is sanctioned for such a class.

4.2.3 Secondary Education

As mentioned earlier Director of Higher Education is responsible for High Secondary Education and College Education. There are two separate Jt. Director for these two divisions.

Unlike Primary Education the ULBs are not managing High Schools. There is a District Education Officer (DEO) who is responsible for smooth functioning of the high schools. Requests for recognition of schools by the Director of Higher Education is processed through the DEO.

Table—4.6 presents some indicators of Higher Secondary School education in selected urban centres of Gujarat. It is interesting to note that there is wide variation in Teacher-Student ratio in these centres.

TABLE- 4.6 : Secondary Education—Selected Centres of Gujarat

	Ahmeda- bad	Baroda	Rajkot	Gondal (Small Town)
No. of Higher secondary schools	263	95	60	10
No. of Teachers	6,000	1,155	1,048	134
No. of Students	112,000	44,333	31,239	4,150
No. of students per teacher	18.6	38.4	29.8	30.9

4.2.4 Financing Pattern

For the purpose of grant the primary schools in Gujarat can be divided into three groups namely:

- Primary School managed by District Panchayat
- Primary School managed by ULBs, and
- Private Primary Schools.

Following statement gives the financing pattern of these schools.

Primary Schools run by District Panchayat	Primary Schools run by local body	Private Primary Schools
	<i>For Ahmedabad</i>	
100% grant for pay of staff and Rs. 1.50 per head (for each student per month)	55% of pay packet 80% of other expenses	Deficit from income of fee and exp. of pay 90% in urban area and deficit 95% in rural area and 1.50 per student
	<i>For Surat, Baroda, Rajkot, Bhavnagar and Jamnagar</i>	
	60% of pay packet 80 % of other expenses <i>Municipalities above 1 lakh population</i> 80% of pay packet 80% of other expenditures <i>Municipalities between 1 lakh and 50,000 population</i> 80% of pay packet 80 % of other Expenditures <i>Municipalities less than 50,000 population</i> 85% of pay packet	

Grant Norms for secondary schools are :

- First year : 25% of expenses or Rs. 6,000 whatever is less.
- Second year : 25% of expenses.
- Third year : (i) 100% of pay packet.
(ii) House rent : 15% of salary or actual.
(iii) 5% of cost of construction (if owned).
Other expenditure : 12 to 20% of payment.

It is important to note here that grant for secondary education is made to the institutions directly whereas in case of primary education it is through the ULBs or the institutions (Table—4.7).

TABLE—4.7 : Grant Pattern for Primary and High Secondary School

	To ULBs	To Institutions
(a) Primary Schools	✓	✓
(b) High Schools	×	✓

Summary statement of primary school expenditure in Baroda is presented in Table—4.8. It shows that expenditure per student has increased from Rs. 285 in 1980/81 to Rs. 620 in 1985/86. About 45% of this amount is received as grant from the state government and remaining amount is spent from own sources of the Corporation.

TABLE—4.8 : *Expenditure in Primary School—Baroda Municipal Corporation*

	1980/81	1985/86
(a) No. of schools	491	475
(b) No. of Students (in thousand)	222.7	210.1
(c) No. of Teachers	5,540	4,987
(d) Total Expenditure (Rs. in lacs)	633.8	1,379.1
(e) Expenditure per student (Rs.)	286	620
(f) % of State Government Grant	50	45

4.2.5 Service Levels

Available level of primary schools and secondary schools per 5000 and 10,000 population respectively is presented in Table—4.9. It indicates that level of services in the three selected cities is satisfactory.

TABLE—4.9 : *Level of Primary and Secondary Schools*

	Popula- tion 1987	No. of Primary Schools	Primary School/ 5000 Popula- tion	No. of Second- ary Schools	Second- ary School/ 10,000 popula- tion
Ahmedabad	27.7	540	0.97	263	0.91
Baroda	8.7	271	1.6	95	1.0
Rajkot	5.2	199	1.9	60	1.2

4.3 Comparative Study

Norms for Delhi Master Plan, keeping in view the perspective for Delhi 2001, have been worked out for provision of adequate educational facilities at various

level considering the age-group projections and other relevant considerations. In primary and secondary schools and colleges separate norms for reservation of play fields areas in the schools have been given. Such norms are not prescribed in Tamil Nadu. In Delhi Master Plan, specific areas have been reserved for city level integrated schools to accommodate Central Schools and Public Schools. Planning Standards are given below :

Type of facility	One per population of
(a) Pre-primary school	2.5 thousand
(b) Primary school (I to V)	5.0 thousand
(c) Sr. Sec. School (VI to XIII)	7.5 thousand
(d) Integrated School without hostel (I to XII)	1.0 lac
(e) Integrated School with hostel (I to XII)	1.0 Lac

The norm for primary School is same in Madras and Delhi. Whereas for Secondary School, the norm is one institute per 7.5 thousand in Delhi and corresponding figure is 10 thousand in Madras. There are no norms prescribed for Integrated Schools (with hostels) in Madras.

There are no wide variations in school service levels in Ahmedabad and Madras (Table—4.10). However availability of schools in non-metropolitan areas of Gujarat is relatively higher than Tamil Nadu. In terms of per student expenditure the service level in cities in Gujarat is much higher. As far as financing pattern is concerned, the ULBs in Gujarat receive about 50 per cent of expenditure as grant. Whereas in Tamil Nadu state, the ULBs receive all the expenditure as grant excluding the education tax.

TABLE—4.10 : *School Service levels in Madras and Ahmedabad*

	Norm	Madras	Ahmeda- bad
Secondary School per 10,000 population		1.10	0.94
Primary School per 5,000 population		1.0	0.97

CHAPTER V

OTHER SOCIAL INFRASTRUCTURE

5.1 Background

Apart from health care and educational facilities recreation forms an important component of Urban Social Infrastructure. This encompasses a wide range of facilities like parks, playgrounds, community hall, drama theatres, etc. In the context of ULB's role, provision of parks and playgrounds is of importance because the private sector is predominant in provision of other facilities. Secondly this involves sizeable investment with little returns which the private sector cannot afford to invest in. Though the Municipal acts provision for above parks and playground, it is left to the discretion of ULB's in the sense that these facilities may be provided subject to the availability of funds and land.

5.2 Aspects Covered

As part of the current paper, only two components of social infrastructure namely parks and playgrounds have been covered. As mentioned earlier the role of local bodies is important from the point of view of investment especially for the urban poor. Further the coverage in this sector pertains to current expenditure only as capital expenditure is generally clubbed along with Public Works in most local bodies which in any case will not serve as a meaningful indicator of investment. Similarly revenue in terms of grants or loans is limited, further allocation of funds is placed under common head of public works.

5.3 Process of Planning

The provision of parks & play fields is discretionary, but there is provision for open space as part of Town Planning Schemes (TPS) or Detailed Development Plans (DDP). About 20% of the land is earmarked for transportation and 10% for open spaces.

The term open space is a misnomer because there has to be a differentiation in terms of levels i.e. private and public open space. Private space has broader implications in terms of space hierarchy and is governed by building bye-law, FSI etc. Which is beyond the scope of this paper. The implication in terms of hierarchical space and importance of private space is best reflected in Correa's New land Scape. As of open space it could mean space for natural function like drainage or for recreation. Hence it becomes necessary to identify hierarchical space needs at different levels like unit, block and city level.

The process of planning for open space is simple but complicated by procedures (Fig. 5.1). The first task involves preparation of TPS or DDP. The second stage involves approval, the third involves acquisition of land and finally creation of facilities. Table 5.1 presents land use distribution reference to public facilities. It can be seen that 1.5% is set aside for Gardens, 27.3% for Schools and playground and 7.5% for Green space. It should be noted that extent of space developed by creation of facilities is not available. Creation of facilities is based on 50% contribution from residents

and 50% from the local body. Though no specific norms is followed a few have been suggested by agencies like Town and Country Planning organisation and National Building Organisation.

For example the minimum requirement for parks is 0.30 acres/1000 population (structure plan, Baroda) and NBRO suggests a park per 5000 population. TCPO on the contrary uses access standard as well as space standard of 1.3 acres per 1000 population and access standard of 0.2 km (for totlet) to 1.3 km depending on hierarchy of open space. This does not seem to be reflected in any of the town plans.

TABLE—5.1 : Baroda—distribution of Space in TP Schemes by use*

Use	%distribution
Garden	1.5
Schools and Playgrounds	27.3
Neighbourhood facilities	27.3
Playground	8.9
Green Space	7.5
Municipal Housing etc.	3.1
TOTAL Area	100.0 (1034172)

*SOURCE : TDO Office, BMC.

5.4 Levels of Services

The earlier section indicated the minimum requirements of 0.30 acres per 1000 population and 1.25 acres per 1000 population being the maximum. A comparative picture of Tamil Nadu and Gujarat towns indicates that except Bhavnagar (2.1 acres/1000 population) the levels of services are below standard. In Ahmedabad the ratio is 0.13, whereas in Baroda it is 0.23. In Madras it is just 0.06 acres. If we go by the population norm it is a park and playfield for every 5000 population. The current status is 1:20000 to 40000 for playfields and 1:17000 to 42000 for parks. Ratio is not the only indicator.

5.5 Expenditure Pattern

In the absence of capital investment figures recurring expenditure per capita indicates that expenditure is highest in Baroda (Table 5.2) which is Rs. 9.50. In Ahmedabad it is Rs. 5 and in Madras it is just Rs. 2.30. The amount is negligible in the case of Tiruchi. It is impertinent to note that Baroda has one of the best maintained park as well as zoo. The above observations reveal that it is not just levels of service but also the expenditure on maintenance which is equally important.

5.6 Social Infrastructure - - Observations and Issues

Though norms are laid as well as space allocation is provided in schemes, a clearcut definition is required in terms of open spaces, Greenspace of parks. The extent of the open space allotted for community facilities in

TABLE—5.2 : Levels of Services in Selected ULB's

	Abmedabad	Baroda	Bhavnagar	Madras	Tiruchi
No. of Parks	57	41	19	88	20
Parks/1000 Popn.	1:41,561	1:22,537	1:16,947	1:38,966	1:18,000
Area/1000 Popn.	0.13	0.23	2.70	0.06	—
No. of playfields	53	1*	—	80	18**
No. of playfields/population	1:44,698	*	*UIL	1:42,863	1:20,000
Expenditure per capita	5.00	9.52	2.55	2.30	Negligible

*Currently ULB maintains only one playfield.

**ULB maintains no major playfield.

TP Schemes of Baroda. 10% is allotted for playground 24% as openspace, 10% as greenspace and 1.5% for Gardens. This essentially signifies that openspace need not be the amount of space utilised is negligible despite space provisions. This is essentially due to budgetary constraints. As per regulation 50% of the cost is contributed by ULB and 50% by owners in terms of development charges. In Madras 10% of land in layouts is set aside for open spaces, which will have to be transferred to the ULB and they in turn are supposed to create and maintain. Development of parks, play-

fields are delayed because development itself takes time and even if created maintenance is constrained by budgetary provision*. This is imperative especially when ULBs are unable to maintain essential services. This aspect of improper maintenance is reflected in Madras structure plan. Madras has a park and playfield for every 40000 population. Many of these are not in good condition. The situation holds good for most ULB's. This needs a closer look in terms of private contribution. Currently their role is confined to traffic islands which of little relevance in terms of use,



CHAPTER VI

CONCLUSIONS AND RECOMMENDATION

6.1 Summary Observations

Education

- (a) In terms of schools per 1000 population metro's present a satisfactory conditions. Overall deficient population is 25% for primary and 24% for secondary education.
- (b) Expenditure per student is reasonably satisfactory for metro and large cities. There is a wide difference between large and small towns.
- (c) While per student expenditure is lower in smaller towns of Tamil Nadu, proportion of education to total current expenditure is 22% . This implies the inability of these local bodies to afford higher level of service.

- (d) In terms of financing of education, local bodies finance primary education through internal resources and grants. The private schools mostly aided avail salary grant. In Tamil Nadu the state government through an enactment has taken over ulb institutions, though they still function under the ulb. A similar view has been expressed by ulb's in Gujarat due to the fact that certain contribution has to be paid to avail education cess.
- (e) Secondary education is not an obligation of ulb's, but major local bodies do provide such facilities funded by State in terms of salary grant.
- (f) The variation in levels of service reflects that norms are not exercised in location of facility.

TABLE 6.1—School services levels in selected centres in Gujarat and Tamil Nadu

Norm	Metre Cities		City	Small and Medium Towns	
	Madras	Ahmedabad	Baroda	Condal**	Small towns of Madras Metropolitan Area
1. Secondary school per 10000 population	1.10	0.94	1.0	1.3	0.40
2. Primary school per 5000 population	1.0	0.97	1.6	1.2	0.56
3. Student per school (a) Primary	425	480	442	440	460
(b) Secondary	957	855	487	415	640
4. Per student expenditure (Rs.) (a) Primary	696	620	620	458	296
5. Primary education expenditure as % of current expenditure of local body	20	12	18	11	22

TABLE 6.2—: Service levels in health facilities—Tamil Nadu and Gujarat

Indicator	Madras	Ahmedabad	Baroda	Small & Medium Towns of MMA
Beds/1000 population	1.54	2.2	1.9	0.34
Per capita annual expenditure on health (Rs.) by local body	22	35	32	12

*Structure plan for Madras (1978) Alan Turner Associates.

**Higher number of school in this town is explained by the fact that this town also serves surrounding rural population.

- (a) The review of health care reflects multiplicity of agencies. The role of private sector is important in this sector. This is more significant in larger towns. The overall deficient population in terms of beds is 27%.
- (b) Ahmedabad presents highest levels of services in terms of beds/1000 population (Table 6.2) as compared to Madras. The role of private sector is to the extent of 38% in Madras, whereas it is 28% in Ahmedabad.
- (c) Levels of services indicate a marked difference between metros and medium towns. This is reflected in Madras metropolitan Area, where levels are 1/5th of city.

- (d) ULB's generally take care of primary health care. Ahmedabad, as an exception runs a fullfledged medical college and hospital. Madras Corporation maintains a communicable disease hospital.
- (e) Norms are generally followed for primary and child welfare centres and are located in areas of concentration of urban poor.
- (f) In terms of per-capita expenditure on public health Ahmedabad presents a better level of service (Rs. 35) whereas in Madras it is less than 50% of that of Ahmedabad. In Madras Metropolitan Area the expenditure per capita works out to Rs. 6.
- (g) Expenditure on public health by ULB forms an important part of ULB's budget. State level agencies expenditure pattern indicate a gross differential in expenditure pattern of agencies within and across urban areas (Table—3.6). DME (Tamil Nadu) spends Rs. 978 per patient whereas ESI spends Rs. 556. This merely reflects over servicing of an urban area in some cases.

Parks and Playgrounds

- (a) This is a discretionary service and levels of coverage indicate a wide disparity among metros. Surprisingly none of the metros have the specified space requirement of 0.30 acre per 1000 population (Table—5.2). Madras indicates a very low level of service (0.06 acres/1000 population). In terms of playfield discrepancy is wider.
- (b) The term open space is ill defined and no regulation binds use of reserved grounds for parks. Transfer of open space for other functions is prevalent, which needs attention. This development of parks is constrained by non-availability of funds.
- (c) Maintenance is equally constrained by finances. In this context ULB's in Gujarat present a better picture than Tamil Nadu. Generally allocation is part of Public Works.
- (d) An indication of maintenance is per capita expenditure. The maintenance investment is higher in Gujarat than Tamil Nadu which reflects quality of parks.

6.2 Financial Projection

This section presents financial projections for education and health care services. These projections are very much sensitive to the study findings in terms of service levels and expenditure based on details of two states. This may lead to significant error. The projections are just indicative estimates of financial requirements.

6.2.1 Education

The steps involved in projection are :

- (i) estimation of current deficiency which is 25% for primary and 24% for secondary level.
- (ii) projection of population for 1991 and 2001.
- (iii) estimate of required number of schools/student population.
- (iv) using investment norm estimate financial requirement for primary and secondary education (Table—6.3 and Annexure-II).

The total capital investment required to meet the deficit and additional population by 1991 and 2001 has been estimated. The requirement stands at Rs. 6988.2 million for primary and Rs. 8537.6 for secondary schools by 1991. The corresponding figure for 2001 is based on the assumption that there will be no deficit by 1991. The figures are Rs. 17604 million and Rs. 23472 million respectively (Annexure-II). No projection has been made for recurring expenditure due to wide variation in levels services. Broadly it is expected to vary between Rs. 350—400 per student.

TABLE 6.3—Population Forecast

	1985	1991	2001*
1. Population (in millions) .	197.66	235.60	333.40
2. Existing unserved			
(a) Education			
i. Primary . . .		49.42	—
ii. Secondary . . .		47.44	—
(b) Hospital beds . . .		51.39	—
3. Incremental l-unserved			
(a) Education			
i. Primary . . .		87.35	97.80*
ii. Secondary . . .		85.37	97.80
(b) Beds . . .		89.33	97.80

*It is assumed that there will be no deficit from 1991.

6.3 Projections—Health

In absence of a clear cut demarcation of functions of different agencies and financing of health sector programs particularly creation of new facilities, Projection exercise of health sector is of limited significance compared to education sector. However, a crude projection exercise has been presented in all (Table—6.5) in terms of requirements of addition hospital bed which, in some sense, is a good *aggregated indicator* or the health facilities. Norms have been based on out study in Tamil Nadu and Gujarat and that proposed for Delhi Union Territory. However, the norms as finally adopted are at the rate of a bed per 250 population. The projections are on the same basis as that of the education. Deficient urban population is 27% projection excludes MCH. This projection is further assumed based on the fact that this excludes

private sectors role. Under this scenario the investment by 1991 will be to the tune of Rs. 53598 lacs and Rs. 136920 lacs by 2001 AD. If we assume that private sector contributes to about 35%, then the requirement will be Rs. 88998 lacs by 2001 (Annexure II). The recurring expenditure will be about 30% of the capital expenditure. It should be noted that the benefits of additional health facilities will also be accrued by Rural population.

6.4 Recommendations and Issues

6.4.1 Education

While for primary education, urban local bodies (ULB) share major functional responsibility in terms of planning, operation and finance for *secondary and higher education the role of ULB is very limited.*

TABLE--6.4 : Facility Requirement and Investment Projection for Urban India

	1985	1991	2001
Population (in Mill.)	197.66	235.60	333.40
Requirement			
No. of primary schools + @ 1/5000 population		17,471	19,560
No. of secondary schools @ 1/10000 population		8,358	9,780
Investment need (Rs.lakhs)			
Primary		69,882	176,040
Secondary		85,376	234,720

NOTE : Investment/primary school assumed at Rs. 4 lakh for 1991 and Rs. 9 lakh for 2001. For secondary education investment requirement is based on Rs. 10 lakhs per school for 1991 and Rs. 24 lakhs for the year 2001.

TABLE--6.5 Health Facility Requirement for Urban India

	1985	1991	2001
Population (in Million)	197.66	235.6	333.4
Beds required @1/250 population		357,319	391,200
Investment requirement (Rs. in lakhs)*		53,598	136,920

*Investment based at Rs. 15000/bed in 1991 and Rs. 35,000 in 2001.

This is mainly entrusted to state department of education university and also private trusts and other agencies. The following recommendations can be considered with reference to primary and secondary education.

(a) All ULB, small and large, should continue to share the major responsibility for primary education unlike the recent move in Tamil-Nadu for the responsibility being shifted to state department of education. This role of ULB is more effective in terms of integrated approach to planning, financing and maintenance of primary education facilities. Further improvement in the level of primary education facilities should be linked with the strengthening of financial base of local bodies.

(b) All major urban local bodies, which can be identified as Corporations should have exclusive responsibility for overall planning and sanctioning process of secondary education system. This can be achieved through setting up of School Committees as in case of primary education and separate treatment of secondary school in the city's development plan.

For non corporations state level agency should assist the ULBs in terms of location decisions and evolve norms or should play an active role like the *primary School Committees of Gujarat.*

(c) No rigid norms in terms of students per school or facilities are considered desirable but left to the planning bodies. This should be based on levels of availment of existing facility and requirement. For example in Tamil-Nadu the District Education Officer is supposed to submit student strength in his district by August and decision is taken on requirement of teachers based on student norms, though norms do exist, they are not rationally allocated at the unit level. The same applies to school location.

(d) Role of State Government is important in terms of financing. There is a need for separate fund for educational planning in municipalities in terms of funding capital investment. One measure could be earmarking a fixed percentage of surplus, as a result of Resource mobilisation measure for such purposes. A recent Resource Mobilisation exercise conducted in Tamil Nadu indicates that the surplus in 1991-92 will be about 8 lakhs (in Salem) to Rs. 423 lakhs (in Coimbatore). A part could be used for social infrastructure.

(e) Role of private sector particularly Trusts and Voluntary agencies needs encouragement but at the same time should be monitored and access should be ensured for the poor. This task of monitoring should be responsibility of the planning body.

6.4.2 Health

- (a) Primary Health Care is an obligatory function of ULB, however there is a need to integrate these with other agencies involved in health planning, especially of higher level services. It is known fact that most of the ULBs will be enable to take care of higher level health care. Specific approach could be in terms of ULBs concentrating on primary health care confining to *Referral Services* and major health care agencies like DME or ESI being in patient treatment centres. This will enable optimisation of existing facilities.
- (b) *Private Sector* is equally dominant in health care. In this context there is a need to integrate this sector in the planning process. This could be achieved by monitoring facilities provided from public health regulation and access point of view. Such facilities could also be used for certain specialist services, if an inventory is maintained. This essentially necessitates registration process.
- (c) The increasing significance of *Employees State Insurance Corporation (ESI)* in the urban health centre has been observed. In terms of per capita expenditure in cities like Madras, ESI spends more than that of Corporation. However, ESI's contribution has nothing to do directly with the urban areas, but it is linked with the location of industrial jobs. It is recommended that ESI's role in urban health sector should be *properly integrated with primary health care system of Corporation and higher level facilities provided by the state government*. In planning for new facilities as well as maintenance system, ESI should draft their plan in consultation with the State Government and Corporation. In particular, *location aspects of facilities and setting up of hospitals* should be planned in an integrated manner with all concerned agencies.
- (d) Above all, planning for health sector in urban India needs a *centralised planning and monitoring system with regard to creation of new facilities by various public and private agencies quality of services and access of the urban poor*. At this stage, it is recommended, that a *State department like Directorate of Health, Medical Services and Medical Education as in Gujarat* can set up such a planning and monitoring cell to look after the functions of urban areas.

(e) *Environmental Improvement programmes for slums* which in a sense can be considered a part of health care system for the *urban poor*, have been already accorded a high priority at Central, State and Municipal level. *State urban development department should immediately draw upon integrated plan of environment health improvement of slums, covering both metro and non metro cities and link them with State and municipal budgets.*

(f) Financial Allocation is a major constraint. If activities are *monitored* by a single agency, allocation of funds can be rationalised in terms of utilisation of existing facility in different agency hospitals.

The *private sector* can be utilised by providing *assistance* in creation of facilities with reservations in the event of necessity. This could be drawn on lines similar to that of education wherein *aided institutions* need to accept government norms in site selection. This again has to be in relation to locational norms, as an efficient spatial distribution means better access. The same applies to voluntary agencies too who could play an important role in special urban project areas.

6.4.3 Parks and Playgrounds

- (a) Parks and playfields have received limited attention in the planning process or in terms of capital investment or maintenance, but it is important from social point of view. This needs an objective planning framework.
- (b) Observed space allocation is unsatisfactory. This needs to be looked up the planning process as well as the implementation of town planning/detailed development schemes.
- (c) Significant portion of surplus as a result of resource mobilisation measures has to be earmarked for creation of parks and playgrounds.
- (d) Stringent procedures are required to prevent transfer of open space for commercial or other purposes.
- (e) In spite of general recommendations, assessment of local needs will have to be considered in developing planning norms for parks and play-grounds. In this context the role of ULB as well as State Planning Department is essential.
- (f) Social infrastructure especially parks and playfields should be taken into consideration as part of the planning process and not partly.

TABLE—AI : Basic Facts of Health and Education—ALL INDIA

State	Total Population Actuals	Total Students Lacs	Expendi- ture Education Lacs	Expendi- ture Per Stud. (Rs.)	No. of Pris. Sch/5000	No. of Sec. Per/ 1000	Expen-iture Health FW (Lac) Lacs	Per Capita exp. health (Rs.)	Beds/10
1. Andhra Pradesh	5,35,49,673	74.89	13,282	177.35	3.79	1.58	11,574.6	21.61	0.73
2. Bihar	6,99,14,734	85.13	12,458	146.33	3.65	2.08	8,938.98	12.79	0.40
3. Gujarat	3,40,85,799	60.43	14,506	240.04	1.64	5.00	9,777.7	28.69	1.06
4. Haryana	1,29,22,618	19.05	4,372	299.55	1.91	1.82	3,130.23	24.22	0.70
5. Himachal	42,80,818	8.11	2,615	322.56	7.12	3.96	2,585.13	60.39	1.40
6. Karnataka	3,71,35,714	59.16	11,134	188.20	3.03	4.12	9,749.14	26.25	1.02
7. Kerala	2,54,53,680	56.37	12,869	228.29	1.35	1.87	7,349.65	28.87	1.96
8. Madhya Pradesh	5,21,78,844	68.18	12,919	189.49	5.46	2.34	8,993.25	17.24	0.40
9. Maharashtra	6,27,84,171	116.45	28,702	246.47	2.83	3.45	17,780	28.32	1.82
10. Manipur	14,20,953	2.91	1,047	359.96	10.06	5.03		0.00	1.41
11. Meghalaya	13,35,819	3.05	414	135.93	14.67	5.07	994.01	74.41	1.50
12. Nagaland	7,74,930	9.86	587	59.53	7.38	5.34	848.57	109.50	1.29
13. Orissa	1,63,70,271	36.69	7,008	191.00	6.81	3.94	5,744.99	21.79	0.57
14. Rajasthan	3,42,61,862	40.91	9,050	221.20	3.28	2.24	8,066.97	23.55	0.73
15. Sikkim	3,16,385	0.55	222	403.62	5.07	2.56	154.21	48.74	3.16
16. Tamil Nadu	4,84,08,077	88.66	16,209	182.82	2.86	1.87	11,644.44	24.05	1.01
17. Tripura	20,53,058	4.43	976	220.22	4.00	2.39	710.16	34.59	0.97
18. Uttar Pradesh	11,08,62,013	146.46	24,183	165.12	3.18	1.69	17,700.56	15.97	0.52
19. West Bengal	5,45,80,647	94.19	12,123	128.70	4.20	1.50	16,014.24	29.34	1.15
20. Jammu & Kashmir	59,87,389	7.91	2,154	272.30	6.18	4.78	2,429.86	40.58	0.84
21. Assam	1,49,57,542	28.43	5,255	184.86	7.26	4.14	3,447.3	23.05	0.87
22. Others	3,15,49,695	33.73	17,818	460.07	2.73	1.92	23,885.35	75.71	1.52
TOTAL	68,51,84,692	1050.55	2,09,903	199.80	3.61	2.47	1,71,519.34	25.03	0.91

TABLE—All : Estimated Financial Requirements for Social Infrastructure—1991—2001

(Figs. in lacs)

STATE	1981		1991		2001						
	Urban Popn.	Urban Popn.	Investment in Beds	Prim. schools	Investment Sec. schools	Total prim & Sec.	Urban Popn.	Investment in Beds	Prim. School	Investment Sec. Schools	Total prim & Sec.
1. Andhra Pradesh .	124.88	184.19	4,190	5,463	6,675	12,138.23	260.65	10,704	13,763	18,351	32,113.45
2. Bihar .	87.19	128.61	2,926	3,815	4,660	8,475.07	181.99	7,474	9,609	12,813	22,422.03
3. Gujarat .	106.02	156.38	3,557	4,638	5,667	1,305.06	221.29	9,088	11,684	15,579	27,263.55
4. Haryana .	28.27	41.70	949	1,237	1,511	2,748.29	59.02	2,424	3,116	4,155	7,271.00
5. Himachal Pradesh .	3.26	4.81	109	143	174	316.85	6.80	279	359	479	838.38
6. Karnataka .	107.30	158.26	3,603	4,694	5,735	10,429.44	223.96	9,198	11,825	15,767	27,592.60
7. Kerala .	47.71	70.38	1,601	2,087	2,550	4,637.79	99.59	4,090	5,259	7,011	12,269.95
8. Madhya Pradesh .	105.86	156.15	3,552	4,632	5,659	10,290.29	220.97	9,075	11,668	15,557	27,224.38
9. Maharashtra .	219.94	324.41	7,380	9,622	11,756	21,378.31	459.07	18,853	24,240	32,320	56,559.43
10. Manipur .	3.75	5.54	126	164	201	364.96	7.84	322	414	552	965.54
11. Meghalaya .	2.41	3.56	81	106	129	234.58	5.04	207	266	355	620.62
12. Nagaland .	1.20	1.77	40	53	64	116.87	2.51	103	133	177	309.20
13. Orissa .	31.10	45.88	1,044	1,361	1,662	3,023.27	64.92	2,666	3,428	4,571	7,998.51
14. Rajasthan .	72.11	106.36	2,420	3,155	3,854	7,008.79	150.51	6,181	7,947	10,596	18,542.77
15. Sikkim .	0.51	0.75	17	22	27	49.65	1.07	44	56	75	131.37
16. Tamil Nadu .	159.52	235.29	5,353	6,979	8,526	15,505.61	332.96	13,674	17,581	23,441	41,022.35
17. Tripura .	2.56	3.77	86	112	137	248.42	5.33	219	282	376	657.23
18. Uttar Pradesh .	198.99	293.51	6,677	8,706	10,636	19,342.42	415.36	17,058	21,931	29,242	51,173.20
19. West Bengal .	144.47	213.09	4,848	6,321	7,722	14,042.56	301.55	12,384	15,922	21,230	37,151.65
20. Jammu & Kashmir .	12.60	18.59	423	551	674	1,225.14	26.31	1,080	1,389	1,852	3,241.99
21. Assam .	13.27	19.57	445	581	709	1,289.86	27.70	1,138	1,463	1,950	3,412.51
22. Others .	124.35	183.42	4,173	5,441	6,647	12,087.39	259.56	10,660	13,705	18,274	31,978.96
TOTAL	1,597.27	2,356.00	53,598	69,882	85,376	1,55,258.86	3,334.09	1,36,920	1,76,040	2,34,720	41,769.00

SUPPLEMENTARY NOTE ON SOCIAL INFRASTRUCTURE

Present note covers education, health and parks and playground facilities. It provides a scenario of present level of services, identifies deficiency, reviews qualitative aspects of specialised urban problems, estimates financial requirement and makes specific suggestions.

Existing Situation

Education is a major thrust area of India's national plan. In terms of schools per 1,000 population, overall deficient population is 25% for primary and 24% for secondary school. Local bodies finance primary education through internal resources and grants. Most of the private schools avail salary grant. Though secondary education is not a obligatory function of urban local bodies, major bodies provide this facility. At present appropriate norms are not exercised for location of education facilities.

In health sector, a number of agencies are working. Private sector plays an important role. Overall deficient, population in terms of beds is 27%. Urban local bodies, generally, provide primary health care. Some large local bodies, such as Ahmedabad maintains a full-fledged hospital. Most of local bodies follow norms for location of primary and child welfare centres.

Parks and playgrounds are discretionary services of the urban local bodies. Wide disparity exist on availability of this services in different urban areas. No regulation binds use of reserved ground and transfer of open spaces for other uses. Development of parks and playgrounds is constrained by lack of local finance.

Qualitative Aspects

Review of qualitative aspects of social infrastructure is limited to Tamil Nadu and Gujarat.

The review of health administration reveals that there exists an overlapping of services in most centres of Tamil Nadu. In Gujarat this is not the case because of a centralized system. Despite centralization as well as overlapping, studies indicate that the target group for which public facilities have been designed, i.e., the urban poor have little faith in public system because

- (i) inaccessibility
- (ii) probability of non-availability of the physician
- (iii) inadequate medicines at the dispensaries
- (iv) un-awareness of facilities extended by each centres.

This is particularly true of ULB maintained dispensaries. Experience in Madras reveals that people (the poor), prefer to use General Hospitals than facilities like those offered by corporation. This movement in turn overburdens the staff of public hospitals like General Hospital, where overcrowding is common. They are forced to offer referral and inpatient treatment. In most Government Hospitals in this kind of a situation, the additional hands is not based on demand for

services but more related to release/allocation of funds to this sector and to a specific centre in the state. As of the preventive aspect which is the thrust of ULBs operation is constrained due to the multitude function of the health officer. The task involves preventive aspects like immunisation, sanitation, anti-malarial programme implementation. Maternity and Child-Welfare, General conservancy, food adulteration, birth and death and referral services. In most ULBs public health accounts for 25—30% of maintenance expenditure. This is considered to be insufficient to provide a reasonable level of services. Further the health officer is overburdened, largely preventing him from concentrating on preventive aspects of health care as well as maintenance of epidemic statistics specific to his local body. The relation between ULB and the other agencies providing health care is not clear except for the fact that the health officer is part of the Directorate of Public Health and preventive medicine (as in T. N.). These agencies do not have a jurisdiction corresponding to the ULBs and information even if processed does not provide a spatial disaggregated dimension of health care problem. Thus, this aspect nullifies the planning process, for location discussions should be based on an analysis of need for a service in a particular location. Further health care is not necessarily related to preventive and curative aspect but also a reasonable level of water supply and sanitation. This as far as health service is concerned the cure of the problem resolves around the ULB in terms of its role in provision of basic services, prevention of diseases, curative aspects and the extent of its influence in locational decisions.

The private sector's contribution is equally significant but uncontrolled, Voluntary agencies/clubs do offer specialized services but more in an adhoc fashion in terms of camps. The authorities have failed to capitalise on such agencies in sharing the burden. It has to be seen how this sector should be integrated into the overall system. This sector is important because their contribution should be considered in any planning decision.

Despite an organised implementation and administrative structure, educational service as a serious set back. In general public facilities stick to local medium, whereas the rush is towards English medium schools. This is mainly due to the policy of the state Governments to stick to local medium than switching over to the popular medium in demand. This has led to proliferation of CBSE "affiliated schools" where the basic requirements for teaching are waived, the facilities for teaching and play are inadequate. In most of the schools affiliated to CBSE or English medium schools the teacher student ratios are higher than that of the local medium schools. The target population of public schools in general is the low income group. It has been observed that qualitative improvement of services is impossible because most ULBs are not in a position to pay the salaries as well as meet the recurring expenditure. The sustenance of these local bodies is partly linked to primary education grant, which is a function of property

(education) tax collection performance. Any delay in reimbursement leads to the ULBs dependance on general funds to meet the expenditure.

As mentioned earlier, maintenance of parks and playgrounds is a discretionary function. When the ULBs are unable to maintain basic services, the question of creation/maintenance of park does not arise, unless grants are provided. Further as far as this service is concerned the maintenance expenditure is not met by any marginal revenue, except in the case of some major parks where a nominal fee is charged. The role of private sector is limited to traffic islands only. Though there are

provisions in TP schemes and master plan for community facilities, there is a time lag between the occupation of these layouts and actual development.

Financial Requirement

Financial requirement has been estimated to meet the existing deficiency and cover the additional population by 1991 and 2001. Till the year 2001, about 19560 primary schools and 9780 secondary schools will be required. As far as health facility is concerned, 391200 beds will be required in the next two decades. Investment requirement is given below :—

Service	Capital Investment Requirement Rs. in crores	
	1991	2001
Primary School	698.82	1760.40
Secondary School	853.76	22347.20
Health	535.98	1369.20

It is needless to add that the urban local bodies are not in a position to generate resources to meet this financial requirement.

Suggestions

The responsibility of primary education should not be shifted to State Government. It should continue to be a responsibility of urban local bodies. There is need to link provision of primary school facility with resource mobilisation measures. Overall planning and sanctioning of secondary school should be responsibility of Municipal Corporations. For non-corporation urban areas state level agency may take up this responsibility. There can be no rigid norms for provision of education facilities.

As far as primary health care is concerned, there is need to integrate this function of urban local bodies with other state level and private agencies. Employees

State Insurance Corporation is playing a significant role in the urban areas. ESI need to set up its facilities in consultation with urban local bodies. Planning for health sector in urban areas need to be planned and monitored by one state level agency. This will also help in allocation of finance for this sector. Support needs to be provided to private sector for provision of health facilities in low-income areas. It could be in terms of provision of land, financial assistance for construction of building and purchase of equipments and partial assistance for maintenance on lines of aided educational institutions.

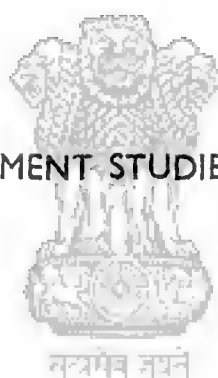
Urban planning process has generally, given very little attention to provision of parks and playgrounds. This social infrastructure should be an integrated part of the urban development process. There should be stringent procedures to transfer open spaces for commercial or other uses.



सत्यमेव जयते

URBANISATION AND URBAN EMPLOYMENT GROWTH

GIRI INSTITUTE OF DEVELOPMENT STUDIES, LUCKNOW





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DECEMBER 1987





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CHAPTER I

INTRODUCTION

BACKGROUND

The process of urbanisation is identified by a rate of growth in urban population, relative to urban areas. The difference between rates of growth of population in rural and urban areas is accounted for mainly by rural to urban migration. Urbanisation also involves shifts in occupation pattern from primary sector to secondary and tertiary sectors. Growth of these urban sectors is deemed to have various kinds of backward and forward linkages with rest of the economy, such as greater availability of relatively more productive and better paid employment opportunities, higher levels of incomes, changes in pattern of consumer demand, changes in attitudes towards quality of production, consumption and life style and so on, leading to further changes in activity structure and further urbanisation. The proportion of urban population is also therefore regarded as a positive indicator of economic development. It may however be added that efficiency of the process of urbanisation to economic development would be in accordance with the degree of correspondence between demand and supply of commodities and factors of production. Of particular importance in this context is the correspondence between the supply and demand of labour in urban areas. For example, if the supply of labour exceeds that of productive employment opportunities, some part of the labour force gets absorbed into the so called urban informal, 'traditional' and 'murky' sectors. A disproportionate growth in these sectors weakens the urban economic structure and its linkages with rest of the economy, and may even lead to a decline in the average productivity of the urban economy, an increase in open unemployment rate and a retarded growth of the national economy. Empirical enquiries into economic aspects of urbanisation are therefore of considerable interest to researchers, planners and policy makers. It is in this background and considering the fact that there has been a noticeable increase in the pace of urbanisation in India, that the present study was undertaken by this Institute on request of the National Commission on urbanisation, Government of India.

SCOPE AND OBJECTIVES

The study is based on the premise that urbanisation is positively related with growth of modern industrial and service sectors in cities and towns. It aims at highlighting the characteristics, factors and implication of urbanisation at all India, Inter-state and Inter-Town levels, particularly from the year 1961 to 1981. The choice of this reference period is made because firstly the rural urban employment dichotomies in census data were introduced only from 1961 and second the population trends during periods before the sixties suffers from abnormalities. The broad issues of the study are:

1. What has been the degree of correspondence between the growth of urban employment and growth of urban population?
2. What has been the pattern of increase in employment in terms of its distribution among different sectors—secondary and tertiary and organised and unorganized?
3. To what extent is industrialisation responsible for rise in employment in urban areas directly and indirectly?
4. How have the urban areas of different sizes—metropolis and large, medium and small towns—fared in terms of growth of employment in improvement in its pattern?
5. How have the urban areas with different base—industry, trade, service and others—fared in providing employment opportunities? and
6. What pace of growth and quality of urban employment can be expected in the next two decades on the basis of the past pattern of growth of urban areas? What factors would determine the capacity of urban areas to productivity absorb an increasingly large population resulting from the natural growth as well as migration from rural areas?

DATA BASE AND METHODOLOGY

The study is based on Census data. The empirical analysis has been carried out at all-India level, across State (or region) groups and across town groups in various size and functional categories. For the above purpose, the 15 largest states, which together represented the country's 96 per cent of total population and 97 per cent and 94 per cent of the rural and urban population in 1981 were selected. Further a sample of 55 towns of different categories were identified for detailed analysis, with the following procedure.

SAMPLING AND GROUPING OF TOWNS

All the cities and towns in India, reported in the 1971 census were listed in descending order of their population for the year 1981. These towns were bracketed in six size categories viz. (A) 2,000 and more, (B) 500—2,000, (C) 100—500, (D) 50—100, (E) 20—50, and (F) below 20 of population in thousand. In the highest size group five cities, namely Calcutta, Bombay, Madras, Delhi and Bangalore were selected purposively because of their special importance in the context of urbanisation. Other sample towns were identified systematically from within each of the size brackets

in require total numbers ranging from 6 to 20, ensuring at the same time that the selected towns are spread well over different parts of the country. The empirical analysis was however carried out across 53 towns only as some discrepancies were noticed in the data for the remaining two sample towns of the lowest size category. The distribution of these towns according to the size groups alongwith names of their states are shown in Table 1.1.

The sample towns have been regrouped into four functional categories, namely 'primary', 'industrial', trade and 'service' on the basis of sectoral distribution of workers in the towns relative to urban India in the following manner. All the sample towns with 25 per cent or more of workers reported in the primary sector were grouped as 'Primary' towns. Then, from the percentage of workers in each of the remaining 'industry', 'trade' and 'service' (excluding trade and commerce) sectors for the individual towns, the corresponding percentage for urban India were subtracted. The functional category of each of the remaining (non-primary) towns has been identified in correspondence with the sector in which the said percentage point difference was the highest. The table 1.2 shows the distribution of the sample towns according to size groups for the year 1981, functional groups for the year 1961 and the change in their functional distribution occurred during 1961-71. The numbers in the 'primary', 'industrial', 'trade' and 'service' categories were 12, 16, 10 and 15 respectively in 1961 and 8, 20, 12 and 13 in 1971. The functional categories of the towns could not be identified for the year 1981 due to non-availability of data.

PREMISES OF EMPIRICAL ANALYSIS

Empirical analysis in this report has been carried out at all-India, inter-state and inter-town levels. Concerning with the employment aspect of urbanisation, an attempt has been made to examine and highlight

the extent to which growth in urban population is matched by growth in productive employment opportunities in urban areas in India, state groups representing regions at different levels of urbanisation and the above mentioned town groups. The state groups are defined in Chapter II. It is assumed that an excess of urban population growth over urban employment growth is mainly resulted by rural-urban migration.

It is believed that the potential for employment growth lies mainly in the industrial sector, where the role of organised industries is especially important. Moreover a faster growth of the organised sector over the unorganised sector implies improvement in the quality of employment. These aspects have been examined in a limited manner subject to availability of data.

Lastly, the study also involves forecasting of the probable situations of urbanisation and urban employment in India over the next two decades. Forecasting exercises have therefore been done for the year 2001 in three alternatives - HIGH, MEDIUM and LOW - of urbanisation across three region groups i.e. at relatively high level of urbanisation (HLU), middle level of urbanisation (MLU) and low level of urbanisation (LLU) and for India as a whole. The methodology of these forecasts is annexed with Chapter V.

ORGANISATION OF THE REPORT

The report has five Chapters. The Chapter I presents the background, scope and objectives and methodology of the study. Chapter II examines the trends in urbanisation for India and at inter-state and inter-town levels. The Chapter III examines the growth of urban employment and sectoral contribution to it in relation to urbanisation. This is followed by the study of future possibilities involving the forecasts, in Chapter IV. The Chapter V presents the conclusions.

TABLE 1.1—Sample Towns by Size Categories and States

Size Category (000)	No. of Towns	States From which Selected
1 2000 and above	7	West Bengal, Maharashtra, Delhi, Tamil Nadu, Karnataka, Andhra Pradesh and Gujarat.
2 500-2000	6	Maharashtra, Rajasthan, Madhya Pradesh, Bihar, Uttar Pradesh and Punjab.
3 100-500	6	Andhra Pradesh, Uttar Pradesh, Gujarat, Tamil Nadu, Karnataka and Orissa.
4 50-100	6	Rajasthan, Haryana, Tamil Nadu, Bihar, Kerala & Uttar Pradesh.
5 20-50	10	Maharashtra, Uttar Pradesh, Gujarat, Andhra Pradesh, Punjab, Kerala, Haryana, Madhya Pradesh, Rajasthan and Maharashtra.
6 Below 20	18	Bihar, Haryana, Karnataka, Maharashtra, Tamil Nadu, Madhya Pradesh, Uttar Pradesh, Karnataka, West Bengal, Tamil Nadu, Gujarat, Uttar Pradesh, Rajasthan, Punjab, Maharashtra, Maharashtra, Madhya Pradesh and Rajasthan.
TOTAL	53	

TABLE 1.2—Distribution of Sample Towns by Size and Functional Categories and Changes in their Functions During 1961-71.

Size Category (000)	Functional Categories 1961					Changes in Town Functions			
	PRI	IND	TRA	SER	Total No.	PRI	IND	TRA	SER
1. 200 and above	—	3	—	4	7	—	-2	+1	-3
2. 500-2000	—	4	—	2	6	—	-1	—	+1
3. 100-500	—	1	1	4	6	—	-1	—	+1
4. 50-100	—	2	2	2	6	—	—	—	—
5. 20-50	3	2	4	1	10	—	+2	-1	-1
6. Below 20	9	4	3	2	18	4	+2	+2	—
ALL GROUPS	12	16	10	15	53	-4	+4	+2	-2

FUNCTIONAL CATEGORIES PRI—Primary; IND—Industry; TRA—Trade; SER—Services other than 'Trade.'

CHAPTER II

URBAN POPULATION TRENDS

SCOPE

Before coming to the relative positions of growth in urban employment and urban population, it would be relevant to have an idea as to how urban population in India has been growing over a fairly long period of time and how different indicators characterise the process of urbanisation in India, different states and town of various categories. Urbanisation means modernisation in positive sense of the term, implying growth in productivity and income levels and improvement in living conditions of the people. It is also a subject of interest to scholars of regional development. What really began to fetch attention of planners and policy makers to urban growth are however its consequences in terms of unabated growth of population in large cities, ensuing difficulties in meeting the demand for urban services, congestion and social disorderliness. From either of these view points and all the more in the context of the present study, it is essential to have an idea of the size and pace of growth of urban population in the country, its regions and the various size and functional categories of towns. These aspects are briefly examined below for India (1901—1981), selected states (1961—81) and the sample towns (1961—81).

INDIA

From the year 1901 to 1981 the country's population increased from 238.4 million to 685.2 million, with its urban component from 25.8 million to 159.7 million. The level of urbanisation expressed as proportion of urban population, was 10.84 per cent in the year 1901, 10.29 per cent in 1911 showing a decline, and then it increased constantly to 23.31 per cent in 1981 (Table 2.1). It may be noted that the period 1901—11 appears to be exceptional so far as the trend in the percentage of urban population is concerned. The table also depicts values of three other indicators of urbanisation, namely the percentage growth of urban population, the difference between urban population percentages at two points of time and the excess of percentage growth in urban population over that in rural population over different periods. Based on these indicators as well as the growth rates of the total and rural population, it is observed that there have been erratic changes in the growth rates and structure of population in India upto the Census Year 1961. For example, the decadal growth percentage of country's total population which was 5.75 during 1901—11, declined to (—) 0.31 during 1911—21, increased to 11.00 over 1921—31 and to 14.22 over 1931—41, declined again to 13.31 during 1941—51 and then kept increasing upto 25.00 over the period 1971—81. Almost similar trends are observed in the rate of growth of rural population. The variations in values of the three indicators of trends of urbanisations, as mentioned earlier, are found to be changing much more erratically up to the year 1961. These abnormalities in demographic changes are attributed mainly to outbreak of plague epidemic

causing mass exodus from cities in 1911, the influenza epidemic in 1918 because of which there was a decline in the size of India's total population, a set back to urban growth during 1921—31 caused by the economic depression, the industrial growth in tune with the second world war leading to a relatively high rate of growth of urban population during 1931—41, the migration of refugees at the time of partition of India which affected the urban population growth during 1941—51, and finally, the strictness observed by the Census Authorities in identification of towns in the year 1961 as compared to the year 1951. The demographic data from 1961 onwards is however relatively free from such abnormalities. For empirical analysis therefore we have confined to the period 1961—81.

The table 2.1 shows that the proportion of urban population increased from 17.97 per cent in 1961 to 23.31 per cent in 1981. This level of urbanisation is considered to be still low. But the forces of urbanisation appear to have gained strength as the percentage growth of urban population increased from 38.23 during 1961-71 to 46.39 during 1971—81. This change in urban growth rate may be attributed partly to an increase in the natural rate of growth of population, but to a large extent to rural—urban migration as indicated by the excess of the percentage growth in urban population over that in rural population, being 16.37 percentage points for the period 1961—71 and 26.71 for 1971—81. It may be added that the decadal rate of growth of rural population has declined from 21.86 per cent 1961—71 to 19.68 per cent in the ensuing decade. The analysis thus suggests that rural urban migration has played the key role in characterising the phenomenon of urbanisation.

In a large country like India, any indepth probe into the phenomenon of development, of which urbanisation is an accompaniment, can not be made without going into its regional dimensions. Let us therefore have a look at the inter-state pattern of urbanisation as presented below. This is followed by an analysis of the size structure of towns in the states at different levels of urbanisation and India as a whole over the period 1961—71 for which the data was available, and that of the population trends in the 53 sample towns by their size and functional groups.

INTER-STATE PATTERN

The selected 15 states represented about 94 per cent of India's urban population and about 97 per cent of the rural population in the year 1981, and thereby provided an adequate basis for studying regional variations in the pace of urbanisation. The urban, rural and total population percentages of these states taken together for the years 1961, 1971 and 1981 are shown in Table 2.2. Here

We are concerned with two questions; namely which states have been contributing relatively more to the growth of India's population and what has been the pace of urbanisation in each of these states.

The table 2.3 depicts the states arranged in descending order of absolute growth in urban population during the decades 1961—71 and 1971—81 separately. Accordingly out of the total 15, the top five, namely Maharashtra, Tamil Nadu, Uttar Pradesh, West Bengal and Gujarat taken together contributed 51.48 per cent while the bottom five contributed only 10.52 per cent of the total increase in the country's urban population during 1961—71. In the subsequent decade 1971—81, the top five states happened to be partly different, namely Uttar Pradesh, Maharashtra, Andhra Pradesh, Madhya Pradesh and Karnataka which jointly contributed 49.96 per cent of the country's urban population growth while the share of the bottom five states stood at 11.35 per cent. Further, excepting Bihar, Haryana and Assam, the contribution ranks of all the states have changed from 1961—71 to 1971—81.

The above analysis, besides bringing out relative importance of various states in India's urbanisation, also leads to the following three observations. First, there is high degree of variation in the contribution of individual states to the country's urban population, so that around half of India's urban growth has been accounted for only by five states. Second, the changes in the state ranks from 1961—71 to 1971—81 suggests that the level of urbanisation or of development provides only partial explanation to inter-regional differences in the pace of urbanisation. In depth studies are therefore needed to understand how urban population grows at a faster rate in one region than in another. And third, in trying to associate the rate of growth of urban population with certain explanatory variables, it appears that the rate of urban growth in a less urbanised state is generally higher than that in relatively more urbanised states. This is empirically evident from increase in the percentage contribution of the bottom five states and decrease in that of the top five states to India's urban population growth from 1961—71 to 1971—81, as discussed earlier. There is also an inverse association between the level of urbanisation (percentage of urban population) and urban population growth rate (Table 2.4). It is however not possible to provide an explanation to this kind of relationship without detailed enquiries which will be far beyond the scope of this study.

The Table 2.4 also depicts the values of the various indicators of urbanisation for different states. Accordingly the states which were relatively more urbanised had their urban population growing at a relatively lower rate and the percentage point increases in their levels of urbanisation were relatively higher, as compared to the less urbanised states. It may be remarked here that the inter-state comparisons in terms of urban growth rate suffer due to marked differences in the 'base' population. Yet the dynamics today appears to be towards reducing inter-regional inequalities in the level of urbanisation.

In view of the indication that level of urbanisation is associated with the pace of urbanisation, further analysis at the inter-state level has been carried out by dividing the states into three groups signifying relatively high level of

urbanisation (HLU), middle level of urbanisation (MLU) and low level urbanisation (LLU) in the year 1971. The states falling in these groups are named below:

HLU : Maharashtra, Tamil Nadu, Gujarat and West Bengal.

MLU : Punjab (including Haryana), Karnataka, Andhra Pradesh, Rajasthan and Madhya Pradesh.

LLU : Kerala, Uttar Pradesh, Bihar, Assam and Orissa.

In this classification Haryana is merged with Punjab because of non-availability of work force data separately for the former for the year 1961. The percentages of urban population in the HLU group of states were 26.41, 28.68 and 31.51 for 1961, 1971 and 1981 respectively, those for the MLU group 21.75, 23.67 and 28.57 and for LLU 9.03, 10.62 and 13.30 in the corresponding years. Taking all these groups together the percentages of urban population in 1961, 1971 and 1981 come to 17.67, 19.48 and 22.75 respectively.

INTER-TOWN PATTERN

At the time of writing this report the number and population in different size groups of towns were available only upto the year 1971, so that the change in town size structure has been studied only over the decade 1961—71. From the year 1961 to 1971 the proportion of large towns (1 lakh+) increased from 3.96 per cent to 4.84 per cent and the proportion of urban population represented by these towns from 44.50 to 48.93 per cent in the country. On the other hand, both these shares of small towns (below 10,000) declined. Thus the 'top-heavy' character of urbanisation is getting perpetuated. The situation is similar in the different state groups so far as size distribution of the towns is concerned (Tables 2.5 & 2.6).

The above analysis however gives no idea of the relative rates of growth of population in different categories of towns. Let us therefore examine the decadal growth rates of population in the 53 sample towns grouped according to population size and functions. The Table 2.7 shows that the population of the sample towns increased by 47.23 per cent during 1961—71 and by only 39.06 per cent during 1971—81. This decline in the population growth rate from 1961—71 to 1971—81 is resulted from the decline in case of towns with population 50 thousands or more; the population growth rates in majority of the towns with population below 50,000 have increased. Across the functional categories we notice that population growth in the 'industrial' towns was the highest at 42.65 per cent during the decade 1971—81 and in 'primary' towns the lowest. Further, from 1961—71 to 1971—81 there has been a considerable decline in the rate of growth of population in 'primary', 'trade' and 'service' towns. This analysis leads to the conclusion that increase in pace of urbanisation in India from the decade 1961—71 to 1971—81 appears to be mainly the result of faster growth population in small towns on the one hand and industrial towns especially the medium and small ones on the other. Another factor which has added to it is the emergence of a good number of new towns in the year 1981.

TABLE 2.1—Urban Population Trends in India : 1901—81

Year	Population (000)		IOU (%)	Decadal Growth of Population(%)			UPGR- RPGR	Change in IOU
	Total	Urban						
1901	238396	25852	10.84	5.75	0.38	6.40	—6.02	—0.55
1911	252093	25942	10.29	—0.31	8.27	—1.29	9.56	0.89
1921	251321	28086	11.18	11.00	9.12	9.98	—0.86	0.81
1931	278977	33456	11.99	14.22	31.97	11.81	20.16	1.87
1941	318661	44153	13.86	13.31	41.42	8.79	32.63	3.43
1951	361088	62444	17.29	21.51	26.41	20.60	5.77	0.68
1961	439235	78937	17.97	24.79	38.23	21.86	16.37	1.94
1971	548160	109114	19.91	25.07	46.39	19.68	26.71	3.40
1981	685185	159727	23.31					

IOU : Index of Urbanisation, i.e. percentage of urban population.

UPGR : Urban Population Growth Percentage.

RPGR : Rural Population Growth Percentage.



TABLE 2.2 : Size of Population in the Selected Major States

Year	Selected States/India	Urban		Rural		Total	
		(000)	% to India	(000)	% to India	(000)	% to India
1961	States	75307	95.40	35085	97.38	426161	97.02
	India	78937	100.00	360298	100.00	439235	100.00
1971	States	103144	94.53	426230	97.08	529374	96.50
	India	109114	100.00	439046	100.00	548160	100.00
1981	States	150001	93.91	509195	96.91	685185	96.21
	India	159728	100.00	525457	100.00	685185	100.00

Note :—The data pertains to the selected 15 States in relation to India.

TABLE 2.3 :—Contributions of Different States in the Growth of India's Urban Population in Descending Order : 1961—71 and 1971—81

PERIOD 1961—71					PERIOD 1971—81				
Rank	State	Contribution			Rank	State	Contribution		
		(000)	%				(000)	%	
1	Maharashtra	4548	15.07		1	Uttar Pradesh	7510	14.84	
2	Tamil Nadu	3474	11.51		2	Maharashtra	6283	12.41	
3	Uttar Pradesh	2909	9.64		3	Andhra Pradesh	4085	8.07	
4	West Bengal	2426	8.04		4	Madhya Pradesh	3801	7.51	
5	Gujarat	2180	7.22		5	Karnataka	3608	7.13	
6	Madhya Pradesh	2158	7.15		6	Tamil Nadu	3487	6.89	
7	Andhra Pradesh	2128	7.05		7	West Bengal	3480	6.88	
8	Karnataka	1856	6.15		8	Gujarat	3105	6.13	
9	Bihar	1720	5.70		9	Bihar	3085	6.10	
10	Rajasthan	1263	4.19		10	Rajasthan	2667	5.27	
11	Kerala	912	3.02		11	Punjab	1432	2.83	
12	Orissa	735	2.44		12	Kerala	1275	2.52	
13	Punjab	649	2.15		13	Orissa	1265	2.50	
14	Haryana	465	1.54		14	Haryana	1054	2.04	
15	Assam	414	1.37		15	Assam	720	1.42	
All States		27837	92.25		All States		46857	92.58	
India		30177	100.00		India		50614	100.00	

NOTE : The Figures for Assam for the period 1971—81 are based on the estimated population of the state for the year 1981.

TABLE 2.4 : Indicators of Urbanisation of the Selected States.

Sl. No.	State	IOU			UPGR 1961—71	Growth % 1971—81	UPGR— 1961—71	RPGR 1971—81	Change in 1961—71	IOU 1971—81
		1961	1971	1981						
1	Maharashtra	28.22	31.17	35.03	40.75	39.99	28.49	22.45	2.95	3.86
2	Tamil Nadu	26.69	30.26	32.95	38.64	27.97	22.34	15.02	3.57	2.69
3	Gujarat	25.77	28.08	31.10	41.00	41.42	15.65	29.39	2.31	3.02
4	West Bengal	24.45	24.75	26.47	28.41	31.72	2.04	11.37	0.30	1.72
5	Punjab	23.05	23.73	27.68	25.27	44.51	4.76	27.04	0.68	3.95
6	Karnataka	22.33	24.31	28.89	35.23	50.54	14.81	31.47	1.98	4.58
7	Andhra Pradesh	17.44	19.31	23.32	33.92	48.64	15.78	31.66	1.87	4.01
8	Haryana	17.23	17.66	21.88	35.58	59.47	4.06	37.31	0.43	4.22
9	Rajasthan	16.28	17.63	21.05	38.47	58.69	12.71	31.23	1.35	3.42
10	Madhya Pradesh	14.29	16.29	20.29	46.67	56.03	21.00	36.75	2.00	4.00
11	Kerala	15.11	16.24	18.74	35.72	37.64	11.10	21.98	1.13	1.50
12	Uttar Pradesh	12.86	14.02	17.95	30.68	60.62	12.50	40.86	1.16	3.93
13	Bihar	8.43	10.00	12.47	43.95	54.76	24.73	34.11	1.57	2.47
14	Assam	7.69	8.87	10.29	45.34	54.27	8.87	23.32	1.18	1.42
15	Orissa	6.32	8.41	11.79	66.31	68.54	44.05	52.82	2.09	3.38

IOU : Index of Urbanisation i.e. percentage of Urban Population to Total Population.

UPGR : Decadal Growth Rate of Urban Population (%).

RPGR : Decadal Growth Rate of Rural Population (%).

NOTE : The figures of Assam for the year 1981 and the period 1971—81 are based on the estimated population of the state for the year 1981.

TABLE 2.5 : *Distribution of Towns According to the Town Size Classes by Groups of States and India*

Year/Town Classes*		State Groups**			All States	India
		HLU	MLU	LLU		
1961 : Class	I	4.02	3.22	4.78	3.98	3.96
	II	6.39	3.95	5.41	5.22	5.15
	III	20.31	17.91	21.97	19.80	19.19
	IV	31.65	30.47	31.57	31.17	30.38
	V	30.21	33.91	30.10	31.59	31.38
	VI	7.42	10.32	6.21	8.24	9.94
All Towns		100.00	100.00	100.00	100.00	100.00
1971 : Class	I	4.80	4.48	5.32	4.82	4.84
	II	8.65	6.39	5.97	7.17	7.02
	III	20.14	20.31	24.94	21.43	20.90
	IV	29.91	35.56	31.95	32.42	31.64
	V	25.45	26.98	26.49	26.26	26.30
	VI	11.05	6.28	5.33	7.90	9.30
All Towns		100.00	100.00	100.00	100.00	100.00

*NOTE : The towns are grouped according to the population size classes as follows :

I. 1,00,000 or more; II. 50,000—1,00,000; III. 20,000—50,000; IV. 10,000—20,000 ; V. 5,000—10,000; VI. Below 5,000.

**HLU : Relatively High Levels of Urbanisation; MLU : Middle Levels of Urbanisation; LLU : Low Levels of Urbanisation; explained in the Section 'Inter-State Pattern' in the Chapter II.

TABLE 2.6 : *Population of Towns Distributed According to the Size Classes by Groups of the Selected States and for India*

Year/Towns Classes*		State Groups**			All States	India
		HLU	MLU	LLU		
1961 : Class	I	50.40	35.41	39.30	43.11	44.50
	II	12.15	11.57	13.52	12.30	12.07
	III	17.83	23.13	22.92	20.68	19.95
	IV	12.42	17.67	15.54	14.79	14.32
	V	6.45	10.66	8.05	8.13	8.03
	VI	0.75	1.56	0.68	0.99	1.13
ALL TOWNS		100.00	100.00	100.00	100.00	100.00
1971 : Class	I	53.68	41.47	42.47	47.24	48.93
	II	14.49	14.08	12.73	13.94	13.49
	III	15.62	20.39	23.71	19.02	18.28
	IV	10.59	16.51	14.25	13.29	12.80
	V	4.78	6.80	6.32	5.77	5.68
	VI	0.84	0.75	0.52	0.74	0.82
ALL TOWNS		100.00	100.00	100.00	100.00	100.00

*Explained in Table 2.5.

**Explained in Table 2.5.

TABLE 2.1 : Growth of Population in Different Size and Functional Groups of the Sample Towns

Size/Functional Groups	Population Growth %	
	1961—71	1971—81
SIZE GROUPS (000)		
1. 2000. and above (7)	47.38	39.69
2. 500—2000 (6)	44.82	40.31
3. 100—500 (6)	65.68	26.48
4. 50—100 (6)	35.18	19.64
5. 20—50 (10)	42.42	43.99
6. Below 20 (18)	29.83	33.17
FUNCTIONAL GROUPS (1961)		
1. Primary (12)	32.66	24.84
2. Industry (16)	46.66	42.84
3. Trade (10)	46.73	26.49
4. Service (15)	47.92	37.06
ALL SAMPLE TOWNS (53)	47.23	39.06

NOTE :—Figures in parentheses show the number of the selected towns.



CHAPTER III

URBANISATION AND URBAN EMPLOYMENT

APPROACH

In India 77 per cent of the people live in rural areas so that the base of supply of migrant labour in cities and towns is substantially large. The force behind migration is also strong because of marked rural-urban differences in income levels and availability of productive employment opportunities. On the other hand the urban base in the country is small and so urban employment opportunities are also limited and might be inadequate to productivity absorb the growing labour-force. Is then urban workforce increasing faster than growth of urban employment opportunities? And if so, what are its implications for quality of employment on the one hand and unemployment on the other? These issues have been examined in this chapter with reference to India, groups of states at relatively high levels of urbanisation (HLU), middle levels of urbanisation (MLU) and low levels of urbanisation (LLU) as defined in Chapter II, and the sample towns by their size and functional groups as stated in Chapter I. Through the analysis for India and the state groups it was felt that a comparison of the workforce data between 1961 and 1971 even for urban areas might not be very realistic because the identification of workers in the year 1961 was made rather liberally. Keeping this in view and the fact that rural-urban migration is male dominated, the inter-town analysis has been carried out using alternatively the male workforce data. This chapter brings reference to the study objectives (2) to (4). In the following section the decadal rates of growth of urban workforce have been examined in relation urban population growth, where urban population growth has been taken as proxy for urban labour force, assuming constancy of the labour force participation rates over the period of analysis. This is followed by evidences on sectoral employment growth and shares in total employment growth and changes in occupational pattern.

GROWTH IN URBAN EMPLOYMENT RELATIVE TO POPULATION

The rural-urban dichotomies in India as summarily described in the beginning of this chapter leads to the hypothesis that the rate of growth of urban workforce is lower than that of the urban labour force. If that is so, then the workforce growth rate would be lower than the population growth rate as well, assuming that the urban labour force participation rates keep from declining. The arguments in support of this assumption are that, first, any considerable change in the age structure of the urban resident population change is not expected over a short period of time and second, as rural urban migration stream is dominated by males who are in search of employment, the urban labour force participation rates may tend to increase rather than decline.

The Table 3.1 shows the decadal growth rates of urban workforce and population which conform to the above hypothesis. It may be pointed out here that the difference between workforce and population growth rates are abnormally high during 1961-71. This is mainly because in 1961 the criteria for identification of workers was liberal, as is also reflected by a high worker-population ratio in that year. The workforce data for 1971 and of main workers for 1981 are by and large comparable and provide a realistic picture of the relative change.

During 1971-81 the growth of urban population in India was by 46.39 per cent while that of urban workforce was lower by 2.36 percentage points. The difference was relatively high in HLU and LLU states. The states middle level of urbanisation (MLU) together exhibited 54.83 percent growth in the workforce which was the highest among other state groups and also exceeded the rate of growth of population by 2.55 percentage points. Like wise the worker population ratio declined in India and state groups HLU and LLU while it increased in the MLU group.

At the inter-town analysis the employment and population growth rates have been compared for males only with a view to reducing the problem of intercensal comparability of workforce data and recognising that rural urban migration is male dominated. The Tables 3.2 and 3.3 show that in all the town groups excepting the 'service' towns, population growth was faster than the growth of workers during 1961-71. But the relative positions are changed with worker: growth proportions exceeding the population growth rates. It appears that the comparison of the workforce data between 1961 and 1971 also has some bias towards lowering down the employment growth rate. Greater reliability is therefore placed on the workforce growth rates over the period 1971-81.

During 1971-81, the workers increased by 36.69 per cent while population by 34.50 per cent, indicating an increase in the male worker—population ratio in the sample towns. Mention may be made in this context that in the sample towns in size groups '50-100' and '100-500' and functional groups 'Industrial' and 'trade', the growth rates of male workers were considerably higher than the rate of growth of male population. The relative importance of town groups in their shares in urban employment growth has however been different.

Taking into consideration the size distribution of towns in India in the year 1971 it is estimated that the towns having population of 1.0 lakh or more, i. e. the census category of Class I, contributed as much as 79 per cent of the total urban employment growth in India during 1971-81. The share of the next two lower categories of towns, i.e. in the size group '50-100' or upper medium towns and '20-50' or lower medium

towns representing the Class II and Class III towns, is estimated as only 13 per cent. In case of 67 per cent of the towns comprising small towns, i.e. 'below 20', the percentage share comes to only 8 per cent. Among the functional categories, the estimates of percentage contribution to urban employment growth come to 57 per cent and 42 per cent by the 'service' and 'industrial' towns, a little over 1 per cent by 'trade' towns and just 0.3 per cent by primary towns during 1961-71. The contribution of industrial towns increased to 59 per cent, exceeding the corresponding figure of 39 per cent of service towns during 1971-81. The contributions of 'trade' and 'primary' town to urban employment growth during 1971-81 were only 1.46 per cent and 0.48 per cent. Thus in terms of contribution to urban employment, importance is attached to Class I towns and those in the 'industrial' category followed by the category. Let us now look at the role of different sectors of the urban economy in augmenting productive employment opportunities.

SECTORAL GROWTH AND SHARES IN EMPLOYMENT

The economy is divided into three major sectors namely 'primary' 'secondary' and 'tertiary' with usual meanings attached to them. During the period 1961-71 in India, the growth of employment in 'primary' sector was 33.01 per cent, i.e. the highest, followed by 20.97 per cent in 'tertiary' and 16.63 per cent 'secondary' sector. But in the subsequent decade 1971-81 the employment growth in the secondary sector went upto 54.14 per cent and was relatively higher than the rates in the remaining sectors. Among the state groups the highest growth of secondary sector employment during 1971-81 was 69.61 per cent for the MLU group. To have an idea of the relative importance of these sectors it is also necessary to look at their contributions to growth in employment.

It may be pointed out at the outset that hardly any importance is attached to primary sector in urban employment growth. Table 3.4 shows that in India secondary and tertiary sectors together accounted for 80.34 per cent growth in urban employment during 1961-71 and 85.56 per cent during 1971-81; the figure for 1961-71 is on the lower side partly due to change in the concept of workers from 1961 to 1971. Across the HLU and MLU states this joint share ranged from 84.63 per cent to 91.12 per cent and was considerably higher than that for the LLU group in any of the two periods. Comparing the secondary and tertiary sectors it may be noted that the percentage share of tertiary sector has been relatively higher because of its larger employment base. But the growth rates attribute greater importance to secondary sector in creation of productive employment opportunities. In particular it may be noted that employment growth rate in secondary sector during 1971-81 was higher than the rate of urban population growth. In this context it will be interesting to look at the performance of industrial sector firstly as a major component of the secondary sector and secondly because of the significance being attached to it while visualising urbanisation as a process of economic transformation.

As depicted in Table 3.5 the rates of growth of industrial workers are found to be of the same order as in case of secondary sector worker for India as well as

for the state groups shown in table 3.4 in India, the urban industrial workforce increased by 18.27 per cent with the highest of 26.74 per cent for HLU states during 1961-71 and by 54.51 per cent with highest of 69.21 per cent for the MLU group of states during 1971-81. The employment growth in the non household Industries was relatively higher, being 34.45 percent during 1961-71 and 56.63 per cent during 1971-81 for which the figure is more realistic. Further within the non-household sector, the data available for 1961 and 1971 shows that organised industries have grown at a considerably higher rate in relation to the unorganised industries (Table 3.5). These trends reveal the importance of industrial sector in integrating urbanisation economic and development and suggest that if the on going process continues, the quality of urban employment will on the whole improve.

In case of the sample towns we find that during 1961-71 the primary sector employment increased by 65.87 per cent but its contribution to total employment growth only 3.80 per cent. The shares of secondary and tertiary sectors were over 48 per cent each. But the rate of growth of secondary sector work force in the period comes to 52.88 per cent which is considerably higher than the figure of 31.02 per cent for the tertiary sector (Table 3.6). Across the size groups the share of secondary and tertiary sectors together in employment was generally over 80 per cent, excepting the group '50-100' and '20-50' for which the figures appear to be abnormal. The percentage growth rates of employment in the secondary sector and its share in total employment growth were higher than those of tertiary sector only for the size group, '2000 and above' and functional groups 'industrial' and 'trade'. It thus also appears that economic characteristics of urbanisation can be studied more meaningfully across functional categories of towns than across their size groups.

OCCUPATIONAL PATTERN

The above analysis reveals that the potential for positive structural change in the economy lies in the secondary sector. The tertiary sector is also expected to grow as a consequence of growth in the secondary sector because the latter tends to enthrone growth in industrial services. But the analysis suggests that the tertiary sector is already large and comprises both formal and informal services. The productivity and income levels in the informal sector is low so that their growth in the economy is restricted. It is therefore possible that with development the relative share of the tertiary sector tends to decline in spite of an increase in that of the secondary sector. This is what we find from the occupational pattern in India and the state groups depicted in Table 3.7.

According to Table 3.7 the 12.55 per cent of the urban workforce was in the primary sector, 32.51 per cent in secondary and 54.94 per cent in the tertiary sectors. These figures are however not really comparable with the figures for 1971 and 1981 for the reason stated earlier. From 1971 to 1981 we find that the proportion of workers in primary sector remained more or less stagnant, in the secondary sector it increased from 31.32 per cent to 33.61 per cent and that in tertiary sector declined from 54.90 per cent to 52.41 per cent for India.

Similar trends in the occupational pattern are found for each of the state groups. The highest proportion of secondary sector workers was the MLU group of the state, being 31.45 per cent in 1981.

In the sample towns taken together, the proportion of male workers in secondary sector increased from 36.18 per cent in 1961 to 39.57 per cent in 1971, while that in the tertiary sector declined from 61.79 per cent to 57.90 per cent. Among the town groups, the portion of

secondary sector workers increased in the size categories. '2000 and above' and '20—50' and functional categories 'primary' and 'service', remained almost stagnant in the groups '100—500', 'below 20' 'industrial' and 'trade' and declined in other groups. The portion of the services sector workers increased a bit in the size groups '500—2000', '50—100' and 'below 20', but declined in all the functional groups. The analysis shows that in general, there has been an upward shift in the proportion of male workers in the secondary sector and decline in that of the tertiary sector during 1961—71.

TABLE 3.1 : Trends in Urban Population and Urban Workforce in Selected States and India

Item	Period	State Groups			All States	India
		HLU	MLU	LLU		
Growth of Urban Population(%)	1961-71	37.13	36.52	37.23	36.96	38.24
	1971-81	35.07	52.28	56.18*	45.43*	46.39*
Growth in Urban Workforce (%)	1961-71	29.72	16.43	20.54	19.35	21.07
	1971-81	35.24	54.83	49.46*	44.21*	44.03*
Difference	1961-71	-25.91	-20.09	-16.69	-22.15	-17.17
	1971-81	-6.92	2.55	-6.72*	-1.22*	-2.36*
Urban Worker	1961	34.43	33.66	31.96	33.60	33.48
Population Ratio (%)	1971	30.31	28.71	28.08	29.28	29.33
	1981	28.75	29.19	26.72*	28.48*	29.23*

NOTE :—The state groups HLU, MLU and LLU refer respectively to relatively high middle and low levels of urbanisation as explained in Chapter I.

*Excluding Assam.

TABLE 3.2 : Decadal Growth of Male Population and Rates Workers in Sample Towns by Population Size Groups

Population Size Group (000)	Period	Growth of Males (%)		Difference
		Population	Workers	
2000 and above	1961-71	44.09	41.81	-2.28
	1971-81	34.42	42.07	7.65
500—2000	1961-71	43.89	32.49	-11.40
	1971-81	39.69	44.96	5.27
100—500	1961-71	76.42	37.90	-38.52
	1971-81	24.91	41.74	16.83
50—100	1961-71	42.97	13.99	-28.98
	1971-81	19.53	32.25	12.72
20—50	1961-71	44.38	23.33	-21.05
	1971-81	46.75	49.17	2.42
Below 20	1961-71	31.65	17.18	-14.47
	1971-81	29.81	39.82	10.01
ALL GROUPS	1961-71	44.97	39.64	-5.33
	1971-81	34.50	36.69	2.19

TABLE 3.3 : Decadal Growth Rates of Male Population and Male Workers in Sample Towns by Functional Groups

Functional Group	Period	Growth of Males(%)		Difference
		Population	Workers	
Primary	1961-71	36.59	14.36	-22.23
	1971-81	26.16	35.05	8.89
Industrial	1961-71	44.50	35.43	-9.07
	1971-81	36.00	56.10	20.01
Trade	1961-71	54.61	27.95	-26.66
	1971-81	26.94	40.78	13.84
Service	1961-71	44.09	44.70	0.06
	1971-81	33.81	32.56	-1.25
ALL GROUPS	1961-71	44.97	39.64	-5.33
	1971-81	34.50	36.69	2.19

TABLE 3.4 : Growth of Workers in Major Urban Sectors and their Contributions in the Urban Employment Growth in Selected States and India

Item	Period	State Group			All States	India
		HLU	MLU	LLU		
1. GROWTH OF WORKERS(%)						
Primary	1961-71	28.52	14.15	80.60	32.75	33.01
	1971-81	27.42	49.26	64.25	44.92	46.10
Secondary	1961-71	20.36	8.60	9.18	14.17	16.63
	1971-81	42.33	69.16	55.64	53.51	54.14
Tertiary	1961-71	19.38	21.82	14.84	18.96	20.97
	1971-81	32.03	48.12	38.75	38.56	37.49
2. CONTRIBUTION TO TOTAL EMPLOYMENT GROWTH						
Secondary	1961-71	35.73	16.10	12.74	25.02	25.66
	1971-81	43.54	36.56	35.25	38.97	38.81
Tertiary	1961-71	49.52	46.58	43.62	53.23	54.63
	1971-81	47.58	69.01	40.89	46.31	46.71
Secondary and Tertiary	1961-71	85.25	85.11	56.35	78.25	80.34
	1971-81	91.12	84.63	76.14	85.29	85.56

TABLE 3.5 : Growth of Urban Industrial Sector in Selected States and India

Item	Period	State Groups			All States	India
		HLU	MLU	LLU		
1. INDUSTRIAL WORKFORCE						
Total	1961-71	26.74	11.84	9.07	18.94	18.27
	1971-81	42.14	69.21	57.94	52.25	54.51
Household Sector	1961-71	-24.68	-31.57	-15.35	-25.10	-23.90
	1971-81	39.53	46.70	46.06	44.02	44.75
Non-Household Sector	1961-71	41.68	39.14	21.02	36.52	34.45
	1971-81	42.51	76.18	61.66	54.05	56.63
2. NUMBER OF INDUSTRIAL UNITS (1961-71)						
Total		1.37	23.71	26.78	13.10	15.20
Unorganised		10.47	19.54	26.18	16.89	26.18
Organised		47.87	94.46	52.67	58.86	52.67

TABLE 3.6 :—Sectorwise Growth of Male Workers and their Contributions to the Total Growth in Male Workers During 1961-71 by Town Groups

		(Percentage)			
Town Groups	Sectoral Growth/ Contribution	Sectors			Secondary & Tertiary Sectors
		Primary	Secondary	Tertiary	
1. POPULATION SIZE GROUP (000)					
2000 and above	GR CON	83.23 2.36	58.85 51.27	31.07 46.37	— 97.64
500 --2000	GR CON	98.73 10.19	25.57 29.70	33.15 60.11	— 89.80
100--500	GR CON	97.37 10.64	37.14 34.03	27.41 55.33	— 89.36
50---100	GR CON	—47.85 —260.20	1.25 15.46	15.31 344.74	— 360.20
20--50	GR CON	54.05 49.83	27.23 30.99	5.77 19.18	— 50.17
Below 20	GR CON	15.05 19.05	17.41 35.61	18.07 45.34	— 80.95
2. FUNCTIONAL GROUP					
Primary	GR CON	11.94 24.98	21.39 34.60	12.42 40.42	— 75.02
Industrial	GR CON	49.38 2.48	34.95 45.06	35.37 52.46	— 97.52
Trade	GR CON	41.92 22.84	27.43 22.83	24.69 54.33	— 77.16
Service	GR CON	135.47 4.28	81.52 50.89	28.35 44.83	— 95.72
ALL GROUPS		65.87 3.80	52.88 48.06	31.02 48.14	— 96.20

GR—Growth; CON : Contribution to Total Growth; Total No. of Towns=53; Data for 1981 was not available.

TABLE 3.7 : Urban Occupational Pattern in Selected States and India

(Percentage of Workers)

Sector	Year	State Group			All States	India
		HLU	MLU	LLU		
Primary	1961	10.72	17.29	11.12	12.85	12.55
	1971	11.41	16.95	16.66	14.29	13.78
	1981	10.75	16.39	18.75	14.42	13.98
Secondary	1961	36.35	30.76	28.50	32.84	32.51
	1971	36.25	28.69	25.82	31.57	31.32
	1981	38.15	31.45	28.55	33.77	33.61
Tertiary	1961	52.93	51.95	60.38	54.31	54.94
	1971	52.34	54.35	57.52	54.14	54.90
	1981	51.10	52.16	52.70	51.81	52.41

TABLE 3.8 : Occupational Pattern of Male Workers in Sample Towns by Size and Functional Groups in 1961 and 1971

Town Groups	Year	Sectors			All Sections
		Primary	Secondary	Tertiary	
POPULATION SIZE GROUP (000)					
2000 and above	1961	1.19	36.42	62.39	100.00
	1971	1.53	40.80	57.67	100.00
500—2000	1961	3.36	37.73	58.91	100.00
	1971	5.03	35.76	59.21	100.00
100—500	1961	3.59	30.10	66.31	100.00
	1971	5.14	29.94	64.92	100.00
50—100	1961	13.48	30.66	55.86	100.00
	1971	16.27	27.23	56.50	100.00
20—50	1961	21.50	26.55	51.95	100.00
	1971	26.86	27.39	45.75	100.00
Below 20	1961	21.74	35.15	43.11	100.00
	1971	21.35	35.22	43.43	100.00
FUNCTIONAL GROUP					
Primary	1961	30.04	23.22	46.74	100.00
	1971	29.41	24.65	45.94	100.00
Industrial	1961	1.78	45.67	52.55	100.00
	1971	1.96	45.51	52.53	100.00
Trade	1961	15.23	23.26	61.51	100.00
	1971	16.89	23.17	51.84	100.00
Service	1961	1.41	27.90	70.69	100.00
	1971	2.30	35.60	62.70	100.00
ALL GROUPS	1961	2.03	36.18	61.79	100.00
	1971	2.53	39.57	57.90	100.00

CHAPTER IV

SCENARIOS FOR THE YEAR 2001

NATURE OF THE FORECASTS

This chapter concerns with future possibilities of urbanisation through the period 1981-2001 based on population and the workforce forecasts. The forecasts have been made in three alternative which refer to HIGH, MEDIUM and LOW levels of urbanisation possibilities in the year 2001, separately for three region groups and India as a whole. The region groups have been defined by levels of urbanisation, viz. those with relatively high levels of urbanisation (HLU), medium levels of urbanisation (MLU) and low levels of urbanisation (LLU) in the year 1981. The methodology of forecasting is presented in the Annexure at the end of this chapter. In the following sections we examine as to what will possibly be the sizes of total and urban population, the sizes of natural growth and migration components in urban population growth increase in population in relation to employment in urban areas and the sectoral and regional patterns of employment growth.

POPULATION

In the year 2001 the country's urban population is expected to be of the order of 323m. according to the 'medium' forecast. The lower and upper limits of urban population as depicted by the 'low' and 'high' forecasts are 299 m. and 348 m. The medium high and low forecasts of the total population are 1069 m., 1036 m. and 1102 m. respectively. In relation to the base year level, the urban population is expected to be doubled during the period while growing at the medium pace, with lower and upper limits to the growth being 87 and 118 per cent. Among the regions, the rate of growth of urban population will be the highest for the LLU group and the lowest for the HLU groups (Table 4.1). This is consistent with our finding earlier that there has been an inverse association between level of urbanisation and rate of growth of urban population across states over the period 1961-81.

With the population growth of these aid magnitudes, the percentage of urban population will increase from 23 per cent in 1981 to a figure ranging from 29 per cent to 32 per cent (Table 4.1). Thus the pace of urbanisation is expected to be considerably higher now than in the past in the country. Among regions the proportion of urban population is likely to increase to about 38 per cent under the 'medium' forecast for both HLU and MLU regions and only to about 20 per cent for the LLU group. But in case urbanisation goes faster, then the MLU regions may exceed the HLU group in terms of the level of urbanisation.

NATURAL GROWTH AND MIGRATION COMPONENTS

The total addition to India's urban population during 1981-2001 will be somewhere between 139 m. to 189 m. The figures for the HLU, MLU and LLU regions groups

are likely to range from 55 m. to 61 m., 46 m. to 68 m. and 38 m. to 59 m. Of this increase, the natural growth will be of the order of 82 m. to 97 m. for India, 34 m. to 43 m. for HLU regions, 31 m. to 32 m. for MLU regions and 17 m. to 22 m. for LLU regions. The remaining part of the increase will be due to rural-urban migration (Table 4.2). In proportional terms the contribution of the natural growth component to the increase in urban population will be about 55 per cent under the 'medium' forecast, 59 per cent under the 'low' and 51 per cent under the high' urbanisation forecast for India. Thus natural growth will be an important factor in the growth of urban population. Rural/urban migration will however be more important in determining the pace of urbanisation; the percentage contribution of the migration component increases from 'low' to 'high' urbanisation forecasts. Among the regions it is only in the HLU group that the share of migration remains relatively low, which may happen in face of relatively slow growth in productive employment opportunities and high cost of living in cities and towns of the most urbanised and developed regions.

EMPLOYMENT GROWTH IN RELATION TO POPULATION GROWTH

The total number of urban workers at the 1981 concept in the year 2001 is expected to range from 80 m. to 97 m. showing an increase over the period ranging from 73 to 11 per cent under the 'medium' forecast, the size of urban workforce in 2001 will be of the order of 833 m. exhibiting an increase of 92 per cent. It will be interesting to examine as to how the expected rate of growth of the workforce compares with that of the population. The Table 4.3 shows that the workforce expected to increase at a lower rate than the rate of growth of population, so that the worker population ratio will decline in urban areas almost throughout the country. In other words, the incidence of urban unemployment in the country is expected to increase. An explanation to this may be found in the gap between growth of urban labour force and that of the employment opportunities.

SECTORAL AND REGIONAL PATTERNS OF EMPLOYMENT GROWTH

Here we are concerned with the employment forecasts for the primary, secondary and tertiary sectors, and their growth over the base year levels and contributions to the total employment growth over the period 1981-2001 for India and the region groups. The Table 4.4, depicting the break-ups of the size of workforce for the years 2001 and 1981, shows that the workforce will grow considerably in each of the sectors. According to the Table 4.5 we find that the percentage growth of employment is expected to be the highest in secondary sector. Moreover the rate of growth of employment only in this sector is likely to exceed that of population. The tertiary sector employment is expected to grow at a relatively low rate.

The regional variations in the employment growth rates are marked. The primary sector employment is expected to grow at the highest rate in the LLU group and at the lowest rate in the HLU group of regions. The percentage growth of primary sector employment is likely to be 109 per cent, with its lower and upper limits at 97 per cent and 122 per cent for the country. The secondary sector employment is expected to grow substantially in the MLU and LLU region groups. For India as a whole under the high and medium forecasts, the secondary sector employment is expected to increase by 152 per cent and 124 per cent respectively. The growth rate of tertiary sector is expected to be the lowest in the HLU group and highest in the LLU region group, with the high, medium and low percentages of 81, 66 and 51 for India (Table 4.5). Let us also take in view the sectoral contributions to employment growth.

Over the period 1981—2001 the addition to workforce is likely to be of the order of 42 m. its lower and upper limits being 33 m. and 51 million. Considering the medium forecasts, the contribution of the primary sector to the total urban employment growth will be to the extent of about 17 per cent, secondary sector over 45 per cent and tertiary sector 37 per cent for India as a whole. Across the regions, the share of primary sector will be highest in LLU and lowest in the HLU group. The percentage contribution of the secondary

sector is likely to be highest in the HLU group and relatively lower but still worthwhile in the MLU regions. The share of tertiary sector is likely to be the lowest in the HLU regions (Table 4.6).

The above forecasts suggest that there will be a perceptible growth in the secondary sector over the period 1981—2001 in India and particularly in the HLU and MLU regions. The rate of growth of this sector in MLU regions will be the highest as compared to HLU and LLU regions and the highest as compared to other sectors for India as a whole. This will be a substantial increase in the absorptive capacity of cities and towns as not only a major proportion of the secondary sector employment would be in the industrial sector but also because the industrial sector employment is expected to grow at a faster rate. Moreover an increase in the proportion of non-household industrial workers to total industrial workers suggests increase in their productivity levels as well (Tables 4.7 and 4.8). The growth in industrial sector of this order is also expected to enhance the pace of economic development, resulting from positive shift in the occupational pattern and there by increase income levels. As seen from Table 4.9 the proportion of secondary sector workers is expected to be in the vicinity of 40 per cent in the year 2001, compared with only about 34 per cent in the year 1981

TABLE 4.1 : Population Forecasts and Levels of Urbanisation for the Region Groups and India for 2001 compared with the 1981 levels

Item	Region Groups by 1981 Status			India
	HLU	MLU	LLU	
1. POPULATION OF 1981				
Urban	67,030	51,634	41,013	159,727
Total	207,739	176,393	301,053	685,185
2. POPULATION FORECAST FOR 2001				
High				
Urban	128,490	119,799	100,082	348,371
Total	344,601	288,707	468,362	1,101,670
Medium				
Urban	125,700	103,617	88,907	323,244
Total	331,700	286,689	450,431	1,068,820
Low				
Urban	122,414	98,062	78,062	299,082
Total	318,719	285,093	432,295	1,036,107
3. PERCENTAGE OF URBAN POPULATION				
1981	32.29	29.27	13.62	23.31
2001				
High	37.29	41.50	21.22	31.62
Medium	37.90	37.89	19.74	30.24
Low	38.41	34.40	18.32	28.87
URBAN POPULATION GROWTH 1981-2001(%)				
High	91.55	132.02	144.03	118.10
Medium	87.42	110.36	116.78	102.37
Low	82.49	88.92	91.66	87.24

TABLE 4.2 : Growth in Urban Population by Natural Increase and Migration Components for Major Region Groups and India During 1981-2001

Growth Factor/Forecast	Regions Groups by 1981 Status			India
	HLU	MLU	LLU	
1. NATURAL INCREASE ('000)				
High	43,004	31,974	22,111	97,089
Medium	38,656	31,211	19,564	89,431
Low	34,271	30,550	16,984	81,805
2. MIGRATION ('000)				
High	18,406	36,191	36,958	91,555
Medium	19,984	25,772	28,330	74,086
Low	21,063	15,878	20,609	57,550
3. Total INCREASE ('000)				
High	61,410	68,165	59,069	188,644
Medium	58,640	56,983	47,894	163,517
Low	55,334	46,428	37,593	139,355
4. (1) AS % OF (3)				
High	70.03	46.91	37.43	51.47
Medium	65.92	54.77	40.85	54.69
Low	61.93	65.80	45.18	58.70
5. (2) AS % OF (3)				
High	29.97	53.09	62.57	48.53
Medium	34.08	45.23	59.15	45.31
Low	38.07	34.20	54.82	41.30

TABLE 4.3 : Growth of Urban Workforce and Population and Change in Worker-Population During 1981—2001

Item	Regions groups 1981 by Status			India
	HLU	MLU	LLU	
1. GROWTH OF WORKERS 1981—2001 (%)				
High	82.90	121.88	149.22	110.72
Medium	73.08	96.45	121.40	91.70
Low	63.26	69.51	95.75	72.67
2. GROWTH OF POPULATION 1981—2001(%)				
High	91.55	132.02	144.03	118.10
Medium	87.42	110.36	116.78	102.37
Low	82.49	88.92	91.66	87.24
3. WORKER-POPULATION RATIO 2001(%)				
High	29.21	28.01	26.00*	27.87
Medium	28.25	27.36	26.00*	27.33
Low	37.36	26.15	26.00*	26.61
4. WORKER-POPULATION RATIO 1981 (%)	30.59	28.86	26.00	28.85

*The forecast was controlled not allow the ratio to decline below 26.00 per cent.

NOTE :—The forecast of total workforce for the year 2001 and the estimate for 1981 are depicted in Table 4.4.

TABLE 4.4 : Urban Workers by Major Sectors for Region Groups and India—Forecast for 2001

(No. in '000)

Sector/Forecast	Region Groups by 1981 Status			India
	HLU	MLU	ILU	
YEAR 2001				
1. Primary				
High	.	.	.	14,290
Medium	.	.	.	13,498
Low	.	.	.	12,705
2. Secondary				
High	.	.	.	39,047
Medium	.	.	.	34,694
Low	.	.	.	30,339
3. Tertiary				
High	.	.	.	43,771
Medium	.	.	.	40,150
Low	.	.	.	36,531
4. All Sectors				
High	.	.	.	97,108
Medium	.	.	.	88,342
Low	.	.	.	79,575
Estimates for 1981				
Primary	.	.	.	6,444
Secondary	.	.	.	15,488
Tertiary	.	.	.	24,152
Total	.	.	.	46,084

TABLE 4.5 : Expected Growth of Urban Workers by Major Sectors Compared with Population Growth for Region Groups and India during 1981—2001

Item	Region Groups by 1981 Status			India
	HLU	MLU	ILU	
1. <i>Primary</i>				
High	79.92	102.62	193.26	121.76
Medium	74.95	102.08	157.84	109.47
Low	69.94	99.67	124.79	97.16
2. <i>Secondary</i>				
High	129.41	164.36	192.08	152.11
Medium	104.50	141.74	146.85	123.98
Low	79.57	117.38	104.38	95.89
3. <i>Tertiary</i>				
High	49.37	102.49	111.36	81.23
Medium	50.61	43.42	95.41	66.24
Low	49.97	28.96	81.24	51.25
4. <i>Population</i>				
High	91.55	132.02	144.03	118.10
Medium	87.42	110.36	116.78	102.37
Low	82.49	89.92	91.66	87.24

TABLE 4.6 : Sectoral Contributions to Growth in Urban Employment in Region Groups and India over the period 1981-2001

Sector/Forecast	Region Groups by 1981 Status			India
	HLU	MLU	LLU	
1. <i>Primary</i>				
High	10.02	13.39	23.57	15.38
Medium	10.66	16.83	23.66	16.69
Low	11.50	22.81	23.72	18.70
2. <i>Secondary</i>				
High	59.22	42.23	36.60	46.17
Medium	54.24	46.02	34.40	45.45
Low	47.71	52.87	31.00	44.34
3. <i>Tertiary</i>				
High	30.76	44.38	39.83	38.45
Medium	35.10	37.15	41.94	37.46
Low	40.79	24.32	45.28	36.96
4. <i>Total Growth in Workforce ('000)</i>				
High	17,009	18,435	15,580	51,024
Medium	14,995	14,588	12,675	42,258
Low	12,980	10,514	9,997	33,491

For each forecast alternative the sectoral percentages add to 100.00.

TABLE 4.7 : Urban Industrial Sector Workforce for Region Groups and India— Forecast for 2001

Sector/Sub-Sector	Forecast	Regions by 1981 status			India
		HLU	MLU	LLU	
Industry Total ('000)	High	14,116	11,466	6,638	32,220
	Medium	13,353	9,522	5,610	28,485
	Low	12,589	7,578	4,582	24,749
Non-Household Industry ('000)	High	13,938	10,067	5,383	29,388
	Medium	13,057	8,284	4,507	25,848
	Low	12,187	6,533	3,646	22,366
Household Industry ('000) (Residual)	High	178	1,399	1,255	2,832
	Medium	296	1,238	1,103	2,637
	Low	402	1,045	936	2,383
Estimate for 1981 ('000)	Industry Total	7,046	4,027	2,673	13,746
	Non-Household	6,188	3,218	2,050	11,456
	Household	858	809	623	2,290

TABLE 4.8 : *Growth of Industrial Workers and Its Share in Urban Employment Growth*

Item	Forecast	Region Groups by 1981 Status			India
		HLU	MLU	LLU	
Growth of Industrial Workers 1981—2001(%)	High	100.34	181.58	148.33	134.39
	Medium	89.51	133.44	109.88	107.22
	Low	78.67	86.10	71.42	80.05
Growth of Non-Household Industrial Workers 1981—2001 (%)	High	125.25	212.83	162.59	156.53
	Medium	111.01	157.43	119.85	125.63
	Low	96.95	103.01	77.85	95.25
Share of Industrial Sector in Secondary Sector Employment Growth 1981—2001(%)	High	70.19	95.95	64.79	78.42
	Medium	77.55	81.86	67.36	76.74
	Low	89.50	63.88	61.60	74.09
Industrial Workforce to total Workforce 2001(%)	High	37.61	34.17	25.81	33.18
	Medium	37.60	32.05	24.27	32.24
	Low	37.58	29.56	22.41	31.10
Non-Household to total Industrial Workers 2001(%)	High	98.74	87.80	81.10	91.21
	Medium	97.78	87.00	80.34	90.74
	Low	96.81	86.21	79.58	90.37
Estimate for 1981 ('000)					
Industrial Workers to total workers (%)		34.40	26.62	25.60	29.83
Non-Household Industry Workers to Total Industrial Workers(%)		87.45	79.91	76.69	83.34

TABLE 4.9 : *Distribution of Urban Workforce by Major Sectors for Region Groups and India— Forecast for 2001*

Sector/Forecast		Region Groups by 1981 Status			India
		HLU	MLU	LLU	
Primary	High	10.24	14.53	21.41	14.72
	Medium	10.52	16.36	21.19	15.28
	Low	10.84	18.74	20.90	15.97
Secondary	High	47.58	37.31	33.33	40.21
	Medium	44.82	38.53	31.71	39.27
	Low	41.72	40.15	29.69	38.13
Tertiary	High	42.18	48.17	45.26	45.51
	Medium	44.65	45.10	47.10	45.45
	Low	47.44	41.11	49.41	45.91
All Sectors	High	100.00	100.00	100.00	100.00
	Medium	100.00	100.00	100.00	100.00
	Low	100.00	100.00	100.00	100.00
Estimate for 1981(%)					
Primary		10.42	15.91	18.20	13.98
Secondary		37.93	31.31	28.43	33.61
Tertiary		51.63	52.78	53.37	52.41
TOTAL		100.00	100.00	100.00	100.00

ANNEXURE TO CHAPTER IV

METHODOLOGY OF FORECASTS FOR THE YEAR 2001

The Model

The forecasts of population and urban workforce are made on the basis of past trends for the region groups defined by levels of urbanisation and for the country as a whole. Conceptually if all the states and union territories are arranged in descending order of the proportion of urban population and then grouped according to the level of urbanisation slabs for the HLU, MLU and LLU states (Chapter II) in the year 1981, the corresponding region groups are defined. These HLU, MLU and LLU region groups so defined would have almost the same structural characteristics as exhibited by the corresponding groups of the selected states, as the latter taken together represented as much as 97 per cent of the country's rural population and 94 per cent urban population in the year 1981. Based on this assumption the estimates of population and workforce for the region groups for 1981 and the forecasts were obtained by proportionately adjusting the figures for the state groups with those of India as a whole. The percentage of urban population for the region group at relatively high level of urbanisation (HLU) comes to 32.29, while for those at middle level of urbanisation (MLU) and low level of urbanisation (LLU) to 29.27 and 13.62 respectively (India 23.31) in the year 1981.

The forecasts have been made on three alternative urban population growth rates, which characterise 'high', 'medium' and 'low' levels of urbanisation for the region groups and India as a whole in the year 2001. As indicated earlier, the exercise was carried out by using data for the groups of the selected states and India separately and then the figures for the state groups were adjusted with national aggregates to arrive at the forecasts for the region groups. Further, because of non-availability of required data for towns, the forecasting exercise covered only the regional dimensions as stated above. The assumptions and procedures of the forecasting of population the contributions of the natural growth and migration factors in the growth of urban population over 1981--2001 and the number of urban workers are described as follows:

Population

The rates of growth of urban population for the three state groups and India were examined separately over the periods 1961--71, 1971--81 and 1961--81. Among these the urban population growth rates during 1971-81 were the highest in all the state groups. It may be assumed that because of the concern of the Government for population control as well as for lowering down the incidence of migration particularly in large cities, the rural and urban population growth rates over 1981--2001 will not exceed the rates obtaining in the period 1971-81.

The growth rates of total and urban population in 1971--81 were therefore used for arriving at the 'high' forecasts for India and separately for the region groups. The 'medium' and 'low' forecasts have been obtained by adopting the remaining two growth rates for India and the region groups separately.

Natural growth and migration components

Empirical evidences show that both birth rates and death rates in rural areas are higher than those in urban areas so that the natural growth rates of rural and urban population are nearly equal. This implies equality between natural growth rate of urban population and actual growth rate of total population in India. Under this assumption the natural growth component of urban population for India and each of the region groups were determined by applying the total population growth rates on the base year urban population figures. The residual growth of urban population has been attributed to migration.

Total urban workforce

The growth rates of total workers were examined for the state groups and India over the periods 1961--71, 1971--81 and 1961--81. It was found that the growth rate of workers and that of urban population differed markedly over 1961--71 because of the difference in the concept of workers from 1961 to 1971 census. The growth rates over 1961--81 were however found reasonable for the 'low' forecasts. For the 'high' forecasts the growth rates over the period 1971--81 were used. The consistency of the total workforce projections were then checked in terms of the worker-population ratios for the regions and compared with those for the state groups. The emerging ratio for LLU region group for 2001 was considerably below 26 per cent and appeared to be too low. The figure for the LLU state group in 1981 was a little over 26 per cent. Therefore the estimates for the LLU regions for 1981 and the corresponding forecasts were controlled to yield a worker-population ratio of 26.00 per cent at the minimum.

Sectoral workforce

Given the forecast of the total workforce, those of primary, secondary and tertiary were worked out by using the 1971--81 growth rates for the 'high' alternative and the 1961--81 rates for the 'low' forecasts as followed in case of total workforce projections. The 'medium' forecasts for these sectors in the region groups and India were obtained by taking arithmetic means of the 'high' and 'low' forecasts. Some minor adjustments were also made to moderate the emerging growth rate

of primary sector workers in case of the MLU region groups. These sectoral forecasts for the region groups and India were then abjusted proportionally to add to the corresponding total workforce figures.

Industrial Workforce

In the industrial sector the total workforce was projected for the region groups and India separately by applying the growth rates over 1971—81 and 1961—81 on the 1981 figures to yield the 'high' and 'low' forecasts. The arithmetic means of these two extremes gave the 'medium' forecasts.

Within the industrial sector it was considered desirable to have the forecasts for organised and unorganised sector on the one hand and non-household and household sectors on the other hand. For the organised and unorganised sectors, identified by units employing upto 9 workers

and 10 or more workers respectively, the data for the year 1981 was not available. Moreover, the workforce data for the two subsectors in 1961 was also not available directly from the census. The exercise was therefore confined to the non-household and household sectors only. This involved some judgement regarding the probable composition of the industrial sector, as the rates of workers in the two sectors as well as the ratio between them varied violently over the reference period and more so during 1961—71. For the purpose of forecasting therefore, the rates of growth of non-household to total industrial workforce ratio over 1971—81 were used to project the said ratio for 2001. This projected ratio multiplied by the size of industrial workforce for each of the region groups and India yielded the 'low' forecast of the numbers in the non-household sector. The medium and 'high' forecasts were similarly determined after adding 1.00 and 2.00 percentage points respectively to the growth rates of the said ratios for the period 1971—81. The forecasts of the number of workers in the household sector were obtained as residuals.



CHAPTER V

CONCLUSIONS

The main conclusions of the study are presented below along with some of the empirical findings. There are six sections in this chapter referring to the objectives of the study in the order as listed in Chapter I.

Correspondence Between Growth of Urban Employment and Growth of Urban Population

During the 1970's the urban employment in India increased by 44 per cent while urban population by 46%. The growth rates of employment and population were found to be in positive association, each influencing the other : while people migrate in urban areas having productive employment potential, part of the rural-urban migration is not selective but simply for earnings beyond what the migrants hope to have in rural areas. In towns with limited employment opportunities, the migration of the latter type tends to force expand the urban informal sector. Interestingly however, the regions at middle levels of urbanisation (MLU), i.e., with proportion of urban population ranging between 22 per cent and 28 per cent, have fared relatively better in productively absorbing the growing urban labour force.

Sectoral Pattern of Urban Employment Growth

Employment in the secondary and tertiary sectors increased by 54 per cent and 37 per cent respectively during the seventies. Taken together, they contributed 86 per cent to the total employment growth in the country. The percentage share of these two sectors together is positively associated with level of urbanisation across state groups, being 91 per cent in the states at relatively higher levels of urbanisation (HLU), 86 per cent in MLU and 76 per cent in the group at low levels of urbanisation (LLU).

Compared with the tertiary sector, the employment in the secondary has grown at a faster rate, so that it is possible to visualise a substantial increase in productive employment opportunities in urban areas. The rate of growth of secondary sector employment in the MLU states was over 69 per cent, which is higher than the figures for the other two state groups.

The pattern of employment growth in the organised and unorganised sectors could not be thoroughly examined due to non-availability of data. But if growth in number of industrial units is any guide, the employment in organised sector units, i.e. having 10 or more worker, has increased nearly twice the rate of employment growth in unorganised sector; during 1961-71 the number of organised sector units increased by about 53 per cent while that of unorganised sector units only by 26 per cent.

Industrialisation and Employment Growth

In India and each of the three state groups, the industrial employment growth rate has been somewhat higher than the growth rate in secondary sector. During the seventies the employment in industrial sector increased by about 55 per cent, contributing about 68 per cent of the total growth in secondary sector and over 26 per cent of that in urban areas. Among the states, the highest percentage growth of industrial employment is observed to be 69 per cent for the MLU group and the lowest of 42 per cent for the HLU group.

The direct impact of industrialisation on employment growth has thus been considerable. There was however no evidence on an indirect impact. It is deemed that industrial growth generates demand for industrial services so that employment in service sector also tends to grow. But the urban service sector in the country is perhaps unduly large, representing 51 per cent of the urban workers. Of the workers in the service sector according to the 1971 census, 49 per cent were employed in the unorganised sector. The unorganised services as, well as part of the organised services have no direct linkages with industrial sector. Further, as development proceeds, the relative size of unorganised sectors tends to get reduced. The study accordingly shows a decline in the proportion of workers in service sector instead of a systematic increase at relatively high levels of industrialisation.

Employment Growth and Quality by Town Size

In India the metropolises (population 20 lakhs and above) and large towns (5-20 lakhs and 1-5 lakhs) together are only 4.84 per cent in number according to 1971 census, but they represent 49 per cent of the urban population. Employment growth rate in these towns has also been relatively higher. In effect therefore, they contributed 79 per cent of growth in urban employment during 1971-81. The upper medium towns (0.5-1 lakh) and lower medium towns (0.2-0.5 lakh) together constituting 28 per cent in the total number of towns in 1971, contributed only about 13 per cent in the said period. The remaining 67 per cent of the towns of small category (below 0.2 lakh) had only about 8 per cent share in the employment growth.

The sectoral pattern of employment growth also brings importance to the metropolitan and large towns. They growth rates of employment in the tertiary sector have been relatively higher in these groups of towns and are found to be positively associated with towns size. An improvement in quality of employment, exhibited by a higher employment growth in industrial sector as a whole and in the organised sector, was noticed. In relation to

the urban economy as a whole, this kind of a change was brought in mainly by the above mentioned town groups, which constitute the class I category as per the census definition.

Employment Growth by Functional Categories of Towns

According to the sample study, the industrial and service towns played a dominant role in providing urban employment opportunities. The contribution in urban employment growth is estimated at about 57 per cent by service towns, followed by 42 per cent by industrial towns, a little over 1 per cent by trade towns and just about 0.3 per cent by primary towns during 1961-71. In the decade 1971-81 the share of industrial towns increased 59 per cent, exceeding the corresponding figure of 39 per cent of the service towns.

Future Possibilities: 1981-2001.

(i) Population Growth and the Shares of Natural and Migration Components

To examine the future possibilities the period 1981-2001 has been kept in view. It is expected that by the year 2001, the size of India's urban population will be somewhere from 300 million to 350 million, with the medium forecast level of nearly 325 millions. The contribution of rural-urban migration to the growth of urban population during 1981-2001 is likely to be from 41 per cent to 49 per cent corresponding to the low and high urban growth forecast and 45 per cent to the medium forecast of urban growth.

(ii) Regional Pattern of Population Growth

The rate of urban population growth is expected to be higher in less urbanised regions due particularly to incidence of rural urban migration; the rural migration base is proportionately large, the urban base is smaller and the rural areas are relatively more backward in the less developed and less urbanised regions.

(iii) Growth of Urban Employment Relative to Population

The urban population in the country is expected to grow by a proportion ranging between 87 per cent and 118

per cent and that of urban employment between 73 per cent and 111 per cent. As such, if the on going trends continue, the incidence of urban unemployment may increase.

Looking at the sectoral pattern, the employment in the secondary sector is expected to grow by 96 to 152 per cent, i.e. at a pace higher than that of the total employment growth, and will account for 44 to 46 per cent of the total urban employment growth. With that, accompanied by still higher growth rates of the organised sector, there will be an over-all improvement in the quality of urban employment.

(iv) Absorptive Capacity

In all, the study shows that the absorptive capacity of the urban economies lies mainly in growth of industrial sector and that greater industrialisation would also bring improvement in the quality of employment. There is ample scope as well as desirability of promoting industrialisation in regions at middle level of urbanisation. Efforts in this direction will be in tune with on going trends and will therefore be effective in substantially increasing the absorptive capacity of the urban areas.

At the town levels however, the population growth in the metropolises and large towns needs to be moderated. Industrialisation should therefore be boosted up in the upper medium towns (0.5-1.0 lakh) followed by the lower medium towns (0.2-0.5 lakh), for which there is tremendous scope. Last, but not the least, there is need to systematically reduce the incidence of rural-urban migration with a view to having a balance between growth of urban employment and that of urban population. Towards this, urbanisation will have to be considered as integral part of the overall process of development. In particular, industrialisation and infrastructural development in rural areas will have to be taken up more effectively so that the incidence of push factor in migration gets reduced. But then if natural growth rate of population goes on increasing as in the past, all these strategies may not be really effective. Concerted efforts are therefore needed to contain the population growth and reduce it as far as possible in a short time span.

THE NATURE AND DIMENSION
OF THE
URBAN FISCAL CRISIS



NATIONAL INSTITUTE OF URBAN
AFFAIRS, NEW DELHI



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PREFACE

This study which we have titled as **THE NATURE AND DIMENSION OF THE URBAN FISCAL CRISIS** analyses the changes that have occurred in the state of municipal finances between 1979-80, the base year of the NIUA's earlier study on the "Financial Resources of Urban Local Bodies in India, and the Level of Services Provided", and 1983-84. Undertaken at the instance of the National Commission on Urbanisation, almost the entire analysis in this study is directed to seeking response to just one question : did the state of municipal finances improve or deteriorate during the period 1979-80 and 1983-84 ? In responding to this question, we have evidently looked at the pace of growth of municipal revenues in relation to municipal expenditures, in order to find out if the fiscal crisis of the municipalities—as indeed it turns out to be so, was due to falling incomes or rising expenditure, or a combination of both. We have examined here the changes in the pattern and structure of municipal finances to see as to which components of incomes and expenditure showed greater resilience and sensitivity, and where, that is, on which components should future attention be directed to for dealing with the fiscal crisis. We have extended the analysis to normative levels by suggesting, among others, the rates at which the municipal incomes will need to be pushed in the coming years so that the gap between the expected incomes and what will be required to maintain services at absolute minimum levels does not widen further.

The results of the study are disturbing. Even though it is not conventional to use the limited space of PREFACE to summarise what the study brings out, there are two features which are so overwhelming that they need to be brought out here itself. Firstly, there is the unmistakeable fact of further deterioration in the state of municipal finances. This study shows that municipal incomes rose during 1979-80 and 1983-84 marginally, by a mere 9.7 per cent in comparison with 56.2 percent increase in municipal expenditures. The surpluses, that is, incomes in excess of expenditure, which the urban local bodies enjoyed in the base year of the study virtually disappeared, though semblance of a nominal surplus was still maintained, at least in the aggregate. What perhaps is most disconcerting was the decline that took place in the real per capita income of municipalities between 1979-80 and 1983-84; whatever increase took place was effectively neutralised by population increase and inflation. Worst affected were the relatively smaller municipalities which registered a fall in their incomes, and at the same time did not have possess any leverage by which they could step up their levels of expenditure, and thereby maintain the services.

Secondly, no noteworthy changes took place in the pattern and composition of municipal incomes and expenditure during the reference period of the study. Property taxes and octroi levies continued to form the main sources of revenues. Notwithstanding the decision looming large to do away with octroi levies, octroi's position in the hierarchy of revenue structure remained undisturbed. The dependence of municipalities on grants from States in 1983-84 stayed more or less at the level of the base year of the study. The only ray of hope in the otherwise dismal state of municipal finances was provided by an appreciable increase (54.9 per cent) in the share of non-tax sources of revenues, which included proceeds from the sale of various types of services and facilities.

That municipalities are *sick*, or on way of becoming so is one overall impression that emerges from the analysis of their financial data. On the face of it, as stated above, there is only one redeeming feature in the entire spectrum of municipal finances : the increasing awareness of the urban local bodies to the potentials of non-tax sources of revenues. As of today, there is a total disjunction between the cost of producing a service or facility and the price at which it is sold. However, whether this, by itself, will restore for municipalities a degree of financial viability appears doubtful. The state of municipal finances is such that it calls for a major reappraisal of the intergovernmental financial relationships, including that of the outmoded forms and systems of fixing tax rates and levies of various sorts. More innovative devices by which their incomes can be linked to increasing economic activity and incomes merit systematic examination and consideration.

A word about octroi may be added here. This study shows that octroi yields anywhere between 23—46 per cent of the total revenues depending on the size of municipalities. That its abolition will cripple the already crippled municipalities unless they can be provided with an alternative tax which is as flexible and liquid as octroi can not be disputed. At the same time, it has been argued that the benefits that would accrue from the abolition of octroi outweigh the benefits that the economy derives from its retention. Indeed, if it is so, it would seem worth while to examine ways how such benefits can be transferred or re-channelled to the municipalities, or atleast used to stem the deterioration in their financial base.

This study has been prepared by Dr. M.P. Mathur and Mr. K.K. Pandey, senior members of the Institute's research faculty. Assisted by a group of research analysts, they had the onerous task of reading the municipal budgets, of tallying them, and of course, analysing them. I would like to place on record my appreciation for their persistence and patience that they showed in preparing this study.

We are grateful to the National Commission on Urbanisation, and especially Mr. Naresh Narad, Member-Secretary of the Commission for entrusting this study to us, and to also periodically discuss the parameters of the study. If the analysis contained in the study can be of some help to the NCU in formulating its recommendations for strengthening the municipal finances, we would consider our efforts repaid in full.



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I. INTRODUCTION

1. The Scope of the Study

Much has been written in recent years about the state of municipal finances in India. (1) The gist of the writings which include, among others, the contributions to the annual conferences of the State Ministers of Local-Self Governments is that the corporations, municipalities and other forms of urban local bodies are in a financial mess, that their capacity to generate resources has remained stagnant, if not registered a decline, and that they are unable to efficiently utilise whatever resources they have at their command. It is contended that as a consequence, the municipalities—this term will be used in this report generically for all forms of urban local bodies, are not in a position to maintain and manage the various services and facilities they are statutorily responsible for. Short of saying that the municipalities are *sick*, almost every available expression has been used to suggest that they have today a crisis unmatched in scale that any time in the past.

2. In 1963 when the Committee of Ministers, known as the Zakaria Committee, presented its seminal study on the augmentation of financial resources, it estimated that the urban local bodies will require resources amounting to about Rs. 990 million annually in order to maintain services such as water supply, drainage etc. at absolute minimum levels. Minimum levels were defined in terms of expenditure norms; thus, for instance, the Committee indicated that major cities will require an annual expenditure of Rs. 43.50 per capita (1960-61 prices) to maintain services at absolute minimum levels. For smaller cities, this figure was placed at Rs. 21.07 per capita.

3. The National Institute of Urban Affairs (NIUA)'s study of the financial resources of urban local bodies (1983) approached the problem of assessing the gap between resources and desirable levels of expenditure from a number of angles, including by employing the same method as had been done by the Zakaria Committee. According to the Zakaria Committee method, the requirements of resources worked out to Rs. 8,330 million annually. If the same arithmetic is extended to the present year, the annual requirements for maintenance of services will well cross the figure of Rs. 12,000 million.

4. A more important feature of the NIUA's 1983 study which was directly concerned with the financial capacity of the urban local bodies was an analysis of the income and expenditure pattern of the municipalities. The study showed, paradoxically enough, that municipalities had in the aggregate a revenue surplus (incomes in excess of expenditure rather than, as many had come

to believe, a deficit in their budgets. The study showed that in 1979-80, the total ordinary income of all municipalities combined was approximately Rs. 8,507 million. As against this, the ordinary expenditure was approximately Rs. 7,566 million, yielding a surplus of Rs. 941 million. Even when the deficit of approximately Rs. 400 million on capital account was taken into consideration, the municipalities still showed an overall surplus of Rs. 540 million. (2)

5. The present study which has been titled as "The Nature and Dimension of the Urban Fiscal Crisis" updates the income-expenditure estimates of the NIUA's earlier study to the year 1983-84. The scope of analysis of the present study, however, is somewhat larger, with focus on four questions :

—What is the present (1983-84) position with regard to the gap between income and expenditure of the municipalities ? Has the position of the gap changed since 1979-80, the base year of the NIUA's earlier study ? ;

.. Does the position of the gap differ with the sizes of urban local bodies ? Or, is it uniform with larger and smaller municipalities alike ?

—Has there been a change in the financial structure of the urban local bodies between 1979-80 and 1983-84 ? What has been the nature and direction of the change ? ;

..What is the degree of elasticity of the various components of incomes ? Are there some components of income that are more elastic than others ? Likewise, what has been the behaviour of the different components of expenditure ?

6. These questions have been examined in this study with a view to understand as to what underlies the present fiscal crisis in the municipalities. Are the causes of the crisis endogenous, that is, local and to be found within the municipalities, or outside of them ? This study has identified a few actions which could result in improvements in the financial viability of the urban local bodies. Certain "grey areas" in terms of gaps in information have also been identified in this study report.

1. See, in particular: Report of the Committee of Ministers on the Augmentation of Financial Resources of Urban Local Bodies (1963); National Institute of Urban Affairs, *A Study of the Financial Resources of Urban Local Bodies in India, and the Level of Services Provided* (1983); Planning Commission, Task Forces on Housing and Urban Development, *II. Financing of Urban Development* (1983); and N.R. Rao, *Municipal Finance in India*, (1986).

2. For details, see : Table 1, Part 1 (vols. 1 & 2), NIUA, *ibid* (1983).

2. Sample and Methodology

7. The NIUA's earlier study was based on the income-expenditure data of 1,533 municipalities, obtained by canvassing a somewhat detailed questionnaire. The reference year of data was 1979-80. For the present study, the NIUA has relied on the budgets of 210 municipalities of various sizes for data on incomes and expenditure. The reference year for the present study is 1983-84. The final selection of the 210 municipalities has been made on the basis of the following considerations :

- data in the budgets should be complete and authenticated;
- comparable data should be available for 1979-80;
- selected municipalities should be of various sizes; and that
- these should be representative of the major states.

8. The distribution of the finally selected urban local bodies by population size-groups is given in Table 1.

TABLE 1 : Distribution of sampled urban local bodies by population size groups*

Population Size Groups	Number	Per cent of total
1 million	7	3.3
100,000—1 million	46	21.9
50,000—100,000	43	20.5
20,000—50,000	67	31.9
- 20,000	47	22.4
Total	210	100.0

9. Population estimates for 1980 (corresponding to 1979-80 income-expenditure data) and 1984 (corresponding to 1983-84) have been made by employing straight-line projection methods and annexed to this report (Annex A). The 1983-84 income-expenditure data have been adjusted to 1979-80 prices so as to eliminate the effect of inflation.

10. The report has three sections besides the introduction. The first section analyses the gap between the incomes and expenditures in the aggregate as well as by different population size groups. It also shows the resource gap, that is, the gap between the incomes and desirable levels of expenditure for sampled municipalities by using the Zakaria committee norms. In the second section, we have examined the changes in the structure of incomes and expenditure. Elasticities of the various

income-expenditure components have also been examined in this section. Suggestions on the future course of action and identification of "gray areas" are contained in the third section of the report.

II. INCOME-EXPENDITURE DIFFERENTIALS REASSESSED

11. As a preface to this section on the income-expenditure differentials, it seems useful to refer to two already known facts. The first refers to the functions and powers of the urban local bodies. Urban local bodies are the creatures of states, and the states, therefore, lay down their functions and resource-raising powers in the municipal Acts. There is no uniformity in their functions but as the functions are few and limited, the differences are not wide. The municipal functions are classified into two groups in all the states, namely, (1) obligatory; and (2) discretionary. In a technical sense, they have a ring of being compulsory and non-compulsory, though the laws have given protection to municipalities from being sued on this account³. The obligatory functions include basic civic functions such as provision of water supply, street lighting, street cleaning, night soil disposal, drainage, cremation and burial facilities, vaccination, registration of births and deaths, fire protection etc. Construction of parks, maintenance of roads, primary education, establishment of markets etc. are some of the discretionary functions.

12. Similar to the laying down of functions, the states municipal Acts specify the resource raising powers of urban local bodies which fall, by and large, under four categories:

—*Tax Sources*—Tax on properties, tax on services, cesses, tax on trades and professions, tax on entry of goods and passengers (Octroi, terminal and toll), etc.;

—*Non-tax Sources*—incomes from municipal investments, rents from public properties, prices for services rendered, fees and licenses, etc.;

—*Grants from the State Governments*—in lieu of taxes, and for administration and municipal service improvement and specific-purpose grants; and

—*Borrowings*—from State Governments and others, including market borrowings as in the case of some corporations.

13. There is not much variation between states in the matter of tax powers entrusted to municipal bodies. But significant variation exists in their application, and in terms of rates, structure and exemptions. The absence of octroi in some states is one such example. Property tax rates vary significantly between states. However, in all cases, states have the final jurisdiction

*The sample of 210 municipalities is weighted in favour of larger municipalities.

³ The Karnataka Municipal Act lists 18 items under obligatory, 3 items under special and 35 items under discretionary functions. In Assam, the functions and powers entrusted to the municipal boards are of three kinds—mandatory, permissive, and agency. The agency services refer to such functions which the municipalities are asked by the Government to perform from time to time on its behalf.

in all matters relating to municipal administration, including the exercise of financial powers allotted to them. Thus for instance:

- the states lay down the tax rates and procedures either in the municipal acts or in the bye-laws framed for the purpose;
- they prescribe the maximum/minimum rates for certain taxes;
- they do not empower the municipalities to revise the tax rates; and
- they restrict their borrowings.

14. The second point which follows from the above refers to their budgetary powers and responsibilities. Under several state statutes, municipalities are barred from preparing and presenting "deficit budgets". For example, section 286(3) (d) of the Karnataka Municipalities Act, 1964, states that the municipal council shall "allow for a balance at the end of the said year of not less than such sums as may be required to meet the establishment charges for a period of 3 months". This means that the budget must provide for a surplus such that establishment charges can be met for the 12 months of the current financial year and three months of the next financial year. Section 91 of the Maharashtra Municipalities Act, 1965, requires every municipal

council to build up a "salary reserve fund, and to credit to it an amount equal to one month's salary of all its employees every year".⁴ Identical provisions exist in the statutes of other states. A surplus balance at the end of the year in the budget of a municipality is, therefore, illusory as it is maintained to satisfy the statutory obligations, rather than representing a genuine surplus of incomes over expenditure.

15. Given these overall parameters within which the urban local bodies exercise their powers and perform their functions, it is not surprising that the NIUA's earlier study revealed a surplus of Rs. 941 million on revenue account. What is interesting is that this surplus was 11.1 per cent of the total ordinary incomes of the surveyed urban local bodies, or roughly equal to one month's incomes.⁵

16. As stated earlier, this study compares the position of the gap for two reference years, namely, 1979-80 and 1983-84, primarily to find out whether there has been any change in the gap, for better or for worse. Table 2 and 3 provide the relevant data on income-expenditure—table 2 on unadjusted (current) prices, and table 3 on prices adjusted (constant) to 1979-80, levels.

TABLE 2 : Ordinary Incomes and Expenditure at Current Prices

(in million Rs.)

Component	1979-80	1983-84	Per cent Variation
Incomes	5,222.9	8,767.4	+67.9
Expenditure	3,568.5	8,526.9	+138.9
Income—Expenditure differential	+1,654.4	+240.5	—
Per cent to incomes	31.7	2.7	—

TABLE 3 : Ordinary Incomes and Expenditure at Constant Prices

(in million Rs.)

Component	1979-80	1983-84	Per cent Variation
Incomes	5,222.9	5,731.8	+9.7
Expenditure	3,568.5	5,574.6	+56.2
Income—Expenditure differential	+1,654.4	+157.2	—
Per cent to incomes	31.7	2.7	—

4. For similar provisions in other states, see, NIUA's 1983 study.

5. It needs to be noted that not all municipalities showed a revenue surplus. A very large number municipal bodies have deficit budgets.

17. Two features stand out from an examination of the above tables. First : surplus on revenue account continues to be an important feature of the municipal budgets. However, this surplus has declined sharply between 1979-80 and 1983-84. In 1979-80, it was 31.7 per cent of the total ordinary incomes, adequate to cover about three month of expenditure of the next financial year. By 1983-84, it has declined to a bare 2.7 per cent, not sufficient to meet the statutory obligations of even one month of salaries and related expenditures. Second : while both incomes and expenditure registered significant increases during the reference period, the growth rate of incomes was much lower in comparison with that of expenditure. Table 3, for instance, shows that expenditures at constant

prices rose by approximately 56 per cent during the four year period; as against this, the growth rate of incomes was 9.7 per cent, or just about 2.0—2.2 per cent compound per annum. At constant prices, the increase in incomes during 1979-80—1983-84 was insignificant. It is also indicative of the fact that the municipalities made no special efforts during this period to either step up collection rate of taxes and other revenues or alter the structure of taxes, levies etc. so as to improve their revenue base.

18. Does the position of the gap change with city-size? Do the municipal bodies of larger cities have higher or lower surpluses than those of smaller cities? Tables 4 and 5 provide the necessary details.

TABLE 4 : Ordinary Incomes and Expenditure by City Size at Constant Prices

(in million Rs.)

City Size	Ordinary Income			Ordinary Expenditure		
	1979-80	1983-84	% variation	1979-80	1983-84	% variation
> 1 million	3,957.4	4,278.8	8.1	2,543.2	4,116.8	61.9
100,000—1 million	946.8	1,098.5	16.0	763.3	1,093.6	43.3
50,000—100,000	185.1	208.2	12.5	145.5	215.3	48.0
20,000—50,000	104.2	114.0	9.4	89.5	115.4	28.8
< 20,000	29.2	32.1	10.0	26.7	33.4	25.5
TOTAL	5,222.9	5,731.8	9.7	3,568.5	5,574.6	56.2

TABLE 5 : Surplus/Deficit by City Size, at Constant Prices

(in million Rs.)

City Size	Surplus (+)/Deficit			
	1979-80	Per cent of ordinary income	1983-84	Percent of ordinary income
> 1 million	1,414.2	35.7	162.0	3.8
100,000—1 million	183.5	19.4	4.9	0.4
50,000—100,000	39.6	21.4	-7.1	3.4
20,000—50,000	14.7	14.1	-1.4	1.2
< 20,000	2.5	8.6	-1.3	4.0

19. Several points can be distilled out of an examination of the above two tables. Firstly, it is evident that the surplus on revenue account, i.e., the excess of incomes over expenditure, declined for all sizes of urban local bodies during the reference period. What is more, the surpluses enjoyed earlier by the relatively smaller urban local bodies, that is, those having populations of less than 100,000 were turned into deficits in the financial year 1983-84. Secondly, while the comparatively larger urban local bodies continued to have surpluses in the revenue account of their budgets these were reduced to insignificant amounts in 1983-84 in comparison with the base year. For instance, in 1979-80 the budgetary surpluses of corporations and larger cities (1 million population) formed 35.7 per cent of the total ordinary

incomes; in 1983-84, the same had declined to less than 4 per cent. For urban local bodies having population ranging between 100,000 — 1 million, the surpluses declined from 19.4 per cent in 1979-80 to 0.4 per cent in 1983-84.

20. The set of data contained in the above tables further show that the decline in the surpluses between 1979-80 and 1983-84 was due to two simultaneously operating forces. On the one hand, the growth rate of ordinary incomes at constant prices, (during 1979-80 and 1983-84) was tardy; it was a bare 8.1 per cent for metropolises, or less than 2 per cent per year. For urban local bodies in other size groups, the growth rate ranged between 9.4 per cent to 16 per cent which was

substantially less than the rate of population growth during this period. As against this, the rate of increase in the ordinary expenditure was extraordinarily high for all sizes of urban local bodies. During the four years (1979-80 to 1983-84), the level of expenditure in the metropolitan cities increased by 61.9 per cent. In other sizes of urban local bodies too, expenditures increased significantly, between 25 per cent to 48.0 per cent. These two forces resulted in eroding the revenue base of the urban local bodies of all sizes.

21. Data on per capita incomes and expenditure at constant prices which take into account the combined effect of population increase and inflation are even more revealing. Given in Table 6, the data show that the per capita ordinary incomes declined between 1979-80 and 1983-84. In the aggregate, the per capita ordinary

income in 1979-80 was Rs. 128; in 1983-84, it declined to Rs. 125. Evidently, the population growth and inflation that took place during the four year period neutralised whatever increase had taken place in the incomes of urban local bodies. Table 6 further shows that the per capita incomes declined consistently for all sizes of urban local bodies, except those which had populations ranging between 100,000—million who managed to somehow maintain the per capita incomes at the 1979-80 levels. As against the decline in incomes, the per capita expenditures rose dramatically during this period. For instance, the aggregate per capita expenditure which was Rs. 87.4 in 1979-80 increased to Rs. 121.6 in 1983-84, registering a growth of nearly 40 per cent which is high by any standard. Among the various sizes of urban local bodies, the metropolitan cities registered the highest rate of increase, it being 45 per cent in a short span of four years.

TABLE 6 : Per Capita Ordinary Incomes and Expenditures by City Size

(in Rs.)

City Size	Income		Expenditure	
	1979-80	1983-84	1979-80	1983-84
+1 million	166.5	162.8	107.0	156.6
100,000—1 million	83.0	83.2	66.9	82.8
50—100,000	65.2	64.4	51.3	66.6
20—50,000	48.6	47.1	41.8	47.7
—20,000	46.0	44.6	42.0	46.4
TOTAL	128.0	125.0	87.4	121.6

22. When this analysis is further extended, it is noted that the financial base of particularly the smaller urban local bodies has become even more fragile than before. As shown in Table 6, the per capita incomes for these local bodies declined during the period. The per capita expenditure which directly contributes to the improvement increase, indicating at most a *status quo* in the level and quality of services at 1979-80 levels.

23. It is worth noting that only 27 per cent of the total sampled urban local bodies (57 in number) improved their per capita income status during 1979-80 and 1983-84. Per capita incomes declined in 28.6 per cent (60) of them, while the balance, that is 44 per cent (93) barely maintained their 1979-80 income levels. Table 7 may be seen for data in this regard.

TABLE 7 : Shift in Per Capita Incomes between 1979-80 and 1983-84, at Constant Prices

Class Size	Shift to Lower (Declined)	No Shift	Shift to Higher	Total No. of Local Bodies
+1 million	1 (1.66)	5 (5.37)	1 (1.75)	7
100,000—1 million	13 (21.66)	18 (19.35)	15 (26.31)	46
50—100,000	12 (20.00)	19 (20.43)	12 (21.05)	43
20—50,000	21 (35.00)	30 (30.25)	16 (28.07)	67
—20,000	13 (21.66)	21 (22.58)	13 (22.81)	47
TOTAL	60 (100.00)	93 (100.00)	57 (100.00)	210

24. As mentioned earlier, the Zakaria Committee had examined in 1963 the entire question of the level of services and the financial implications for maintaining them at absolute minimum levels. The Committee had recommended in this regard expenditure norms for different classes of urban local bodies. The NIUA's 1983 study upgraded those norms to 1979-80 price level, and applied them to assess the resource gap, i.e., the gap between the incomes and expenditure that would be required by the urban local bodies to maintain the services at absolute minimum levels. This gap was assessed at Rs. 8,330 million annually for the entire universe of 1,533 municipalities and other forms of urban local bodies.⁶

25. This resource gap has been reassessed for 1979-80 and 1983-84 for the sampled urban local bodies, by using the same methodology and adjusted expenditure norms, and shown in Table 8 below.⁷

TABLE 8 : Estimated resource gap in sampled urban local bodies for 1979-80 and 1983-84

(In million Rs.)

City Size	Resource Gap		Per cent Variation (+)
	1979-80	1983-84	
+1 million	1,030.6	1,294.3	25.5
100,000—1 million	852.7	1,076.6	26.2
50—100,000	170.8	197.4	15.5
20—50,000	129.5	152.2	17.5
—20,000	32.5	36.4	12.0
TOTAL	2,216.1	2,756.9	24.4

26. The table shows that the resource gap for the sampled local bodies increased from Rs. 2,216 million in 1979-80 to Rs. 2,756.9 million in 1983-84. What it in effect shows is that the ordinary incomes during the reference period of the study did not increase fast enough to reduce the gap between the incomes and the levels of expenditure required to maintain the services at absolute minimum levels. It also suggests that the gap will continue to rise if the rate of growth in incomes is not stepped up, or alternatively if the expenditure norms are not brought down to levels lower than what they presently are. The table indicates that if the incomes of the municipalities increase at the same rates as these did during 1979-80 and 1983-84, then the resource gap will increase at roughly 5—5.5 per cent per annum in the following years.

27. The overall conclusion that emerges from this analysis of income-expenditure data of 210 urban local bodies is that there has been a further deterioration in

the state of their finances during 1979-80 and 1983-84. It is reflected particularly in the following :

- (a) tardy growth in the ordinary incomes of urban local bodies not only in the aggregate but across the different classes and sizes;
- (b) an extraordinarily high rate of increase in their ordinary expenditures, thus, wiping out much of the surpluses that were enjoyed earlier by the urban local bodies ;
- (c) the surpluses which formed in 1979-80, 31.7 per cent of the ordinary incomes declined to a bare 2.7 per cent in 1983-84, confirming widely-held fears that the urban local bodies divert capital funds for maintenance of services;
- (d) the per capita ordinary incomes registered a decline in real terms during the reference period;
- (e) the state of finances of particularly the smaller urban local bodies is in shambles. Their incomes declined in per capita terms; at the same time, they were unable to raise their per capita expenditures indicating that the quality of services at most remained at the 1979-80 levels, if not registering further deterioration;
- (f) the resource gap, that is the difference between the ordinary incomes and the level of expenditure required to maintain services at absolute minimum levels further increased. If the rate of increase in ordinary incomes continue to be the same as it was during 1979-80 and 1983-84, the resource gap will grow at roughly 5 to 5.5 per cent per annum;
- (g) the number of urban local bodies whose per capita incomes either declined or remained at 1979-80 levels is higher than those whose income status improved during 1979-80 and 1983-84, signalling that the financial crisis is engulfing every year a larger number of municipalities.

III. SHIFTS IN THE STRUCTURE OF MUNICIPAL FINANCES

28. What changes took place in the structure of municipal finances during the reference period of this study forms the subject-matter of this section. This section also examines the effects and implications of the changes on the overall financial viability of the urban local bodies. The section is divided into two parts; in the first part, we have analysed the changes in the composition of municipal incomes, while the second part of the section is devoted to an examination of the shifts in municipal expenditures.

6. It included depreciation as well.

7. Resource gap 1979-80 equal to (Revenue Income at 1979-80 price minus per capita expenditure norms multiplied by 1980 estimated population for each urban local body). For 1983-84, population estimates for 1984 have been used. Incomes are at 1979-80 prices. Annex. B gives the resource gap for each urban local body.

A. Municipal Incomes

29. The following chart showing the main components of income of the urban local bodies serves as a useful starting point for this section.

CHART A : *Main Sources of Incomes*

Components of Income	Sub-Components
Income from taxes	<p>A. Tax on property and services : house tax; water tax; lighting tax; drainage and conservancy tax; etc.</p> <p>B. Tax on entry of goods : octroi; terminal tax; toll tax; etc.</p> <p>C. Other taxes : tax on professions, trades & callings; advertisement fee; tax on boats; pilgrims; entertainment tax; educational cess; animal and vehicle tax; etc.</p>
Non-Tax Components	Fee; fines; rents and prices; betterment levy etc. and proceeds from the sale of services.

Components of Income	Sub-Components
Grants and Contributions	General purpose grant for the maintenance of services and establishment cost and grants in lieu of assignment of taxes.
Miscellaneous	Any other sources of income excluding above.

30. In addition to the above, it also needs to be restated that the states specify the rates of various taxes, fees etc., and do not permit the urban local bodies to change the rates and schedule of taxes etc. In this sense, the urban local bodies are unable to exercise their own assessment of the local economy for the improvement and strengthening of their revenue base. This is evident from the following analysis of the structure of municipal incomes. Table 9 gives the revenues from various sources for 1979-80 and 1983-84.

TABLE 9 : *Composition of the income base at Constant Prices 1979-80 and 1983-84*

(in million Rs.)

Composition	Income				Per cent variation
	1979-80	% to total	1983-84	% to total	
Tax sources	3,595.8	68.8	4,148.2	72.4	15.4
Non-tax sources	376.0	7.2	582.5	10.2	54.9
Grants and contributions	842.2	16.1	879.3	15.3	4.4
Miscellaneous	408.7	7.8	121.7	2.1	-70.2
TOTAL	5,222.9	100.0	5,731.8	100.0	9.7

31. A number of important features can be noted from the above table. Firstly, the revenues from tax sources continued to maintain their overwhelming position in the overall revenue structure of the urban local bodies with contributions from other sources being comparatively insignificant. In fact, there was further strengthening of the tax sources of revenues during the period of this study. As shown in the table, the share of tax revenues increased from 68.8 per cent in 1979-80 to 72.4 per cent in 1983-84. Grants and contributions from states though a shade less in 1983-84 (15.3 per cent) compared to 1979-80 (16.1 per cent), continued to be the second most important source of revenue for the urban local bodies. Non-tax sources with a share of 10.2 per cent in the total revenues constituted the third major source. What is important is that the relative position of the various revenue components remained unchanged during 1979-80 and 1983-84.

32. Secondly, while the basic composition of the revenues remained unchanged, incomes from non-tax

sources increased by 54.9 per cent during the reference period of the study. At constant prices, it constituted an extremely significant increase, reflecting a growing awareness among the municipalities towards enlargement of their revenue base on the one hand, and thinning down of dependence on the more traditional source of incomes, on the other. It represents, in a sense, the only positive development at the municipal levels as far as their revenue structure is concerned. As the table shows, other changes in the revenue structure of urban local bodies were marginal and of little significance.

33. When one analyses the shifts in the structure of municipal incomes by population size of municipalities the picture that emerges differs sharply from what is given above. Table 10 below contains data in this behalf.

TABLE 10 : *Income Structure by City Size at Constant Prices*

(% share to total income)

Class Size	Tax Income		Non-Tax		Grants		Miscellaneous	
	1979-80	1983-84	1979-80	1983-84	1979-80	1983-84	1979-80	1983-84
1 million	73.4	74.7	7.0	10.9	12.1	13.3	7.5	1.1
100,000—1 million	54.8	70.2	7.0	7.4	28.9	19.2	9.3	3.2
50,000—100,000	54.9	53.0	8.8	7.5	26.7	26.1	9.6	13.4
20,000—50,000	51.2	49.6	11.0	12.5	31.1	30.9	6.6	7.0
—20,000	58.6	48.7	12.6	13.3	24.7	29.5	4.1	8.5
TOTAL	68.8	72.4	7.2	10.2	16.1	15.3	7.8	2.1

34. It is obvious from the table that the relative importance of the various sources of incomes varies with the size of the urban local bodies. The share of incomes from tax sources, for instance, is higher in larger sized municipalities and corporations and lower in smaller local bodies. The table shows that the share of tax incomes declined between 1979-80 and 1983-84—from 54.9 to 53.0 per cent in the case of 50—100,000 population—sized urban local bodies; from 51.2 to 49.6 per cent for 20—50,000 population—sized local bodies, and from 58.7 to 48.7 per cent in the case of urban local bodies having less than 20,000 population. Conversely incomes from tax sources in the case of corporations and larger municipalities which were substantial to begin with further increased during the study period. Similarly, the share of incomes from non-tax sources rose appreciably in larger municipal bodies and corporations, and only marginally in smaller urban local bodies, indicating that it is only the larger municipalities which have begun to take advantage of the non-tax sources. Relatively smaller municipalities are still to recognise their potentials.

35. Yet another feature that stands out from the above table is the high degree of dependence of particularly the smaller urban local bodies on the grants and contributions from the states. In percentage terms, it ranged

between 26.1 per cent for urban local bodies in population range of 50—100,000, and 30.9 per cent for those which had populations falling within a range of 20—50,000. By any standards, these represent a very high degree of financial dependence.

36. It is equally revealing to analyse the changes in the structure of incomes in per capita terms. These are shown in Table 11 on next page : It was shown earlier that the per capita municipal incomes at constant prices declined during the reference period of the study—from Rs. 128 in 1979-80 to Rs. 125 in 1983-84. This feature was observed for all sizes of urban local bodies, except those which had populations ranging between 100,000 and 1 million. In their case, the municipal incomes showed a notional increase of 0.2 per cent during a four-year period.

37. Component-wise per capita incomes given in the above table suggests that the decline was essentially due to a dramatic fall in incomes from "miscellaneous" sources. In 1979-80, miscellaneous sources yielded on a per capita basis an income of Rs. 10.1; in 1983-84, it fell to only Rs. 2.6. More important than this feature, are however, the figures on the per capita income from tax sources. As may be seen from the table, these registered a decline across all sizes of urban local bodies except,

TABLE 11 : *Component-wise Per Capita Incomes at Constant Prices*

(in Rs.)

Class Size	Tax		Non-Tax		Grants		Miscellaneous	
	1979-80	1983-84	1979-80	1983-84	1979-80	1983-84	1979-80	1983-84
1 million	122.2	121.5	11.7	17.8	20.2	21.7	22.0	1.8
100,000—1 million	45.4	58.4	5.8	6.2	7.7	2.7	24.1	15.9
50,000—100,000	35.8	34.1	5.7	4.8	17.4	16.8	6.3	8.7
20,000—50,000	24.9	23.4	5.4	5.9	15.1	14.5	3.2	3.3
—20,000	26.9	21.7	5.8	5.9	11.4	13.2	1.9	3.8
TOTAL	88.1	90.5	9.2	12.7	20.6	19.2	10.1	2.6

as stated above, for those having population ranging between 100,000—1 million. In per capita terms, non-tax revenues displayed buoyancy, increasing consistently for all sizes of urban local bodies except for those which had population varying between 50—100,000.

38. What explains the declining role of the tax in comes in the overall tax structure of the urban local bodies ? Was it due to the stagnancy in certain sources of tax revenues? In Table 12, we have given the share of the principal sources of tax incomes by size groups of urban local bodies for 1979-80 and 1983-84.

TABLE 12 : Composition of Tax Incomes

Class Size	Property Tax		Octroi		Others	
	1979-80 % share in total income	1983-84 % share in total income	1979-80 % share in total income	1983-84 % share in total income	1979-80 % share in total income	1983-84 % share in total income
>1 million	21.2	34.5	29.5	33.8	22.8	6.3
100,000—1 million	10.4	9.7	33.8	46.0	10.6	14.5
50,000—100,000	8.0	10.0	24.4	26.6	22.4	16.4
20,000—50,000	6.7	6.8	25.8	23.4	18.7	19.5
—20,000	4.9	5.5	31.8	24.7	21.9	18.5
TOTAL	18.4	28.2	30.0	35.6	20.5	8.6

39. Property taxes and octroi levies are the mainstay of the revenue base of the urban local bodies in India. Together they account for anywhere between 60—70 per cent of the total revenues. Incomes from other tax sources form a small proportion of the total incomes.

40. The most important tax available with the urban local bodies is the octroi tax. Despite the fact that it is viewed as an "inherently bad tax" and that a decision in principle to abolish it seems to have been taken, its overall position in the tax structure of urban local bodies remains dominant and undisturbed. In fact, the percentage of incomes accruing from octroi increased from 30 per cent in 1979-80 to 35.6 per cent in 1983-84, allaying all notions that municipalities are gradually moving away from their reliance on this tax to other substitute taxes. It continues to be the single most important source of revenue for all sizes of urban local bodies. In urban local bodies which have populations ranging between 100,000 to 1 million, its share in the total incomes was 46 per cent in 1983-84.

41. In 1983-84, property tax yielded in the aggregate 28.2 per cent of the incomes of sampled municipalities. Between 1979-80 and 1983-84, its share increased dramatically, from 18.4 to 28.2 per cent. Property taxes are particularly important for >1 million cities. As the table shows, the metropolitan cities rely to the extent of a little over one-third of the total ordinary incomes on property taxes. It is also indicative of the construction activity in larger cities as compared to the smaller ones.

42. It is significant to note that property tax as a source is not significant for relatively smaller local bodies. Surveys indicated three reasons for the relative insignificance of property tax as a source or revenue :

- (a) the inability of the smaller local bodies to undertake periodic valuation of properties ;

- (b) gross inefficiencies in the collection of taxes and

- (c) their inability to use the prescribed limits of tax rates.

43. Inability to fully utilise the property taxes as the main source of revenues is not only the characteristic of smaller local bodies, but of larger ones as well. In all size groups of urban local bodies, revenues from property taxes on a per capita basis declined during 1979-80 and 1983-84. Table 13 may be seen in this regard :

TABLE 13 : Per Capita Incomes from Property Taxes

Class Size	Per capita incomes (Rs.)	
	1979-80	1983-84
>1 million	35	28
100,000—1 million	9	7
50,000—100,000	6	7
20,000—50,000	3	3
—20,000	3	3
TOTAL	23	19

44. The foregoing analysis shows that —

- (a) Incomes from non-tax sources increased appreciably during the reference period, indicating an increasing awareness of the urban local bodies to these sources. This is particularly so with larger municipalities and corporations who seem to be in the process of widening their revenue base by greater use of non-tax sources of revenues.

(b) Notwithstanding the growing share of the non-tax sources, the incomes from tax sources continue to be the most important source of income. In 1979-80, its share was 68.8 per cent; in 1983-84, it had increased to 72.4 per cent. At the same time, it is important to note that the overall importance of the tax sources declines with the size of the urban local bodies.

(c) The dependence of smaller local bodies on grants and contributions from the states is overwhelming. The share of grants in their incomes ranged between 26.1 per cent and 30.9 per cent in 1983-84. Between 1979-80 and 1983-84, the dependence showed a marginal decline.

(d) Octroi as a single source of income remains dominant in the urban economy. A little over one-third of the total incomes are derived from octroi. It is evident that if it is abolished, it will cripple the financial viability of the urban local bodies.

(e) Property tax is an extremely important source of revenue. However, it is only the metropolises which have made attempts to revalue properties and make better use of this as a source of revenue. Smaller municipal bodies have not been able to use this source effectively, either because of local pressures which do not permit them to undertake property valuations or even raise the tax rates to the permissible limits, or due to total indifference to their own state of municipal revenues.

45. The facts given above indicate an utter lack of concern on the part of the urban local bodies and state governments to the entire question of municipal revenues. The 4-year period witnessed a fall in the overall revenues across almost all size-groups of urban local bodies. Tax revenues showed no buoyancy at all. Property taxes which are often used as a measure of growth declined on a per capita basis. It is important to point out in this connection that 180 out of 210 surveyed local bodies either remained within the same per capita tax income bracket, and moved into the lower income bracket during this period. Even in the case of non-tax revenues only 24 urban local bodies (11.42 per cent) moved to higher per capita tax income bracket; others either moved to lower or stayed within the same per capita income brackets. Details of the upward or downward movement of the urban local bodies are shown in Tables annexed with this report.

B. Pattern of Municipal Expenditure : Mao Shifts

46. Comparable to chart A in the preceding section which showed the main components of incomes, Chart B below gives the broad categories of municipal expenditures.

CHART B Main Components of expenditure

Components of expenditure	Sub-components	Items
A. Establishment	1. General administration	--Administration --Collection of revenues --Other miscellaneous expenditure
B. Operations	1. Public Safety	--Street lighting --Fire fighting etc.
	2. Public Health	--Water Supply --Sewerage, drainage, scavenging and street cleaning & public conveniences
	3. Public Works	--Roads, streets and subways
	4. Public Instruction	--Education, libraries and reading rooms.
	5. Recreation	--Parks, playground, stadia etc.
	6. Miscellaneous expenditure	

47. Ordinary expenditures include the financial spending by urban local bodies on the delivery and maintenance of urban services and, of course, on general administration. These are divided broadly under two main categories, namely: (i) establishment, and (ii) operations. While the establishment covers the expenditure on administration, the 'operations' include expenditure on the maintenance of various services such as public safety, public instruction, public health, public works, recreation etc.

48. It is important to point out at the very outset that expenditure on 'establishment' is a relatively small proportion of the total expenditure of urban local bodies. In 1979-80, it was a bare 11.4 per cent; the balance was devoted to the maintenance of the various services. In per capita terms, the expenditure on establishment was Rs. 10; it was assessed to be Rs. 77.4 on operations.

49. Within the general area of operations, 'public health' which includes expenditure on water supply, sewerage, drainage, scavenging, and public conveniences accounted for the highest expenditure. In 1979-80, it was placed at Rs. 20.9 per capita, or 23.9 per cent of the total. It was followed by public works which accounted for 17.3 per cent of the total expenditure.

50. The extent and nature of the changes in the pattern of municipal expenditure during 1979-80 and 1983-84 are analysed below. Table 14 and 15 give the relevant data.

TABLE 14 : *Changes in the pattern of Expenditure at Constant Prices*

Component	Expenditure (Rs. in Million)			Per capita	
	1979-80	1983-84	% age	1979-80	1983-84
Establishment	408.7	834.6	104.2	10.0	18.2
Public Health	852.5	2,081.9	144.2	20.9	45.4
Public Works	614.5	650.1	5.8	15.1	14.2
Public Safety	256.1	248.9	-2.8	6.3	5.4
Public Instruction	414.9	804.0	93.8	10.2	17.5
Recreation	66.2	72.8	9.9	1.6	1.6
Miscellaneous	955.6	882.3	-7.6		
TOTAL	3,568.5	5,574.6	56.2	87.4	121.6

51. Three changes in the pattern of expenditure are discernible from the above table—

- an extraordinarily large increase in the expenditure on establishment. During the period under reference, the increase in the establishment costs was 104.2 per cent—almost 24—24.5 per cent per annum. Also, the share of establishment costs in the total increased from 11.4 per cent in 1979-80 to almost 15 per cent in 1983-84. In per capita terms too, expenditure on establishment increased from Rs. 10 to Rs. 18.2 during this period.
- an equally perceptible increase in the expenditure on “public health” and “public instruction”—what the data show is that public health and public instruction together accounted for over 40 per cent of the total expenditure of urban local bodies. It is to be noted that expenditure on public health includes maintenance expenditure on water supply, scavenging, drainage etc. which increases in direct proportion to population. It is, therefore, not surprising that maintenance expenditure on public health rose at such a high rate during the four-year period. Expenditure on public instruction which is dependent on the grants from the states, also showed a perceptible increase during this period.
- stagnation in the maintenance expenditure on public works, public safety and recreation—in per capita terms, there was a virtual stay on the expenditure on these components, which would mean, on the face of it deterioration in the availability of these services.

52. It was shown earlier that the overall ordinary expenditure of the urban local bodies rose during the period of the study by 56.2 per cent, or about 12—12.5 per cent annually. What was important was that the rate of increase in expenditure bore close relationship with the size group of the local bodies. Larger the size

of the local body, higher was the increase in expenditure which meant both the capacity of the larger metropolises to incur expenditure, as well as the compulsive nature of the expenditure on, for instance, the provision of basic services and facilities for the growing number of slum areas and squatter colonies. However, when one examines the pattern of increase, that is, whether this overall increase is due to the increase in expenditure on “establishment”, or on “operations” then the picture that one obtains is that the establishment costs rose during the period by 104.2 per cent in the aggregate as compared to a 50 per cent increase in the operations. The increase in the establishment costs in the larger cities, i.e. both the metropolises and those which had populations ranging between 100,000 and 1 million was significantly higher than the rates in other, smaller sizes of urban local bodies. Table 15 gives the relevant data.

TABLE 15 : *Percentage variation in establishments costs by major Groups at constant prices*

City Size	Per cent variation between 1979-80 to 1983-84		
	Establishment	Operations	Aggregate
+1 million	144.2	84.6	61.9
100,000—1 million	72.8	36.6	43.3
50,000—100,000	31.6	48.1	48.0
20,000—50,000	15.0	32.4	28.8
—20,000	15.4	28.7	25.5
TOTAL	104.2	50.0	56.2

A city-size analysis of expenditure on operations is contained in Table 16.

TABLE 16 : *Per Capita Expenditure on Maintenance of Various Services at Constant Prices 1979-80 and 1983-84*

Components	Metropolitan		Class I		Class II		Class III		Class IV		All	
	1979-80	1983-84	1979-80	1983-84	1979-80	1983-84	1979-80	1983-84	1979-80	1983-84	1979-80	1983-84
Public Health	24.3	60.9	17.3	26.3	14.6	24.3	12.5	18.4	13.8	15.4	20.9	45.4
Public Works	18.9	13.9	10.4	15.4	8.2	14.8	8.0	10.8	9.1	11.2	15.1	14.2
Public Safety	8.9	7.1	2.7	3.3	2.4	3.1	2.2	2.9	2.0	3.5	6.3	5.4
Public Instruction	13.4	25.6	6.7	7.9	4.7	6.2	2.9	3.1	0.3	0.6	10.2	17.5
Recreation	2.6	2.3	0.3	0.8	0.1	0.3	0.6	0.4	0.5	0.2	1.6	1.6
TOTAL	97.9	136.5	54.7	64.6	41.7	55.5	33.2	38.9	30.4	34.6	77.4	103.4

53. The-city size analysis follows the overall pattern of higher per capita expenditure of the operations and maintenance of public health and public instruction components. Two variations, however, need to be noted. Firstly, in the metropolitan cities, the sharp increase in the expenditure on public health and public instruction was accompanied by a decline in the per capita expenditure on other components such as public works, public safety and recreation. Such is not the case with other sizes of urban local bodies. In fact, all components excepting 'recreation' registered increases in per capita expenditure during the reference period. Secondly, the per capita expenditure on operations is consistently lower in smaller municipalities in comparison with the larger ones. In smaller municipalities, the expenditure per capita in 1983-84 was a bare Rs. 34.6; even the increase during the four year period was insignificant. On the other hand, the metropolises and other larger urban local bodies (100,000—1 million) registered appreciable increases in their expenditures.

54. The data on expenditure also shows that a much larger number of urban local bodies shifted to higher per capita ranges. Almost 39 per cent (80 out of 210 municipalities) moved to higher per capita expenditure bracket, while 29 of them (13.8 per cent) moved into lower expenditure brackets.

55. In sum, the analysis shows that —

- Expenditure in the aggregate increased at an extraordinarily high pace during the study period ;
- Expenditure on establishment rose by almost twice the rate of expenditure on operations and maintenance of services. In per capita terms, establishment expenditure increased from Rs. 10 in 1979-80 to Rs. 18.2 in 1983-84— an increase of over 80 per cent. As compared to this, the expenditure per capita on operations increased by 33.9 per cent during the 4 year period. Also, in proportionate terms, expenditure on establishment which was 11.4 per cent in 1979-80 increased to 15 per cent during the financial year 1983-84.
- Public health as a sector is the most important component of expenditure with the urban

local bodies. Expenditure on public health registered a steep rise during the reference period. The only other component on which expenditure increased was public instruction. Expenditure on other components either declined or rose insignificantly.

IV. THE NATURE AND DIMENSION OF THE FISCAL CRISIS : CONCLUSIONS AND AREAS OF POSSIBLE ACTION

56. The one unmistakable conclusion that emerges from the analysis of income-expenditure data of 210 municipalities is that the state of municipal finances deteriorated during the period 1979—84 and 1983-84. The resource base of these municipalities which was fragile to begin with further weakened. Furthermore, while the deterioration and weakening of the resource base was widespread, cutting across the different population sizes of local bodies, worst affected were the relatively smaller local bodies. Several facts would corroborate the above conclusion, and even at the cost of repetition, it is useful to briefly recapitulate them here.

- (1) As shown earlier, the surpluses, that is, the municipal revenues in excess of expenditure, which the urban local bodies had enjoyed in the base year of the study, virtually disappeared within a matter of four years. The surpluses constituted 31.7 per cent of the total municipal incomes in 1979-80; in 1983-84, these had dropped to a mere 2.7 per cent, strongly indicating that the municipalities failed to maintain even the statutory surpluses which they are expected to under the provisions of the various state municipal legislations⁸. The position in the case of smaller municipalities was even more dismal as their surpluses turned into deficits— a 7.1 per cent deficit in case of municipalities in the population range of 50—100,000; of 1.4 per cent for those which had populations varying between 20—50,000, and 1.3 per cent for those having populations of less than 20,000. These facts would tend to confirm the oft-repeated claim that the municipalities often divert capital funds or withhold payments in order to meet their recurring financial obligations.

8. Expenditure in excess of incomes is not a new phenomenon even though the municipal legislations do not provide for such deficits. Thus, the NUA's earlier study had shown 63 out of the sample of 210 urban local bodies having deficit budgets in 1979—84. This number increased to 109 in 1983-84. Furthermore, deficit budgets were not confined to smaller urban local bodies alone; for their size distribution see Table Annex-7.

(2) The decline in the state of municipal finances during the reference period of the study was due to the interaction of two simultaneously operating forces. On the one hand, the growth rate of municipal incomes was tardy, a mere 9.2 per cent in a four year span or an annual compound growth rate of anywhere between 2—2.2 per cent. As against this, the municipal expenditures registered an extraordinarily high increase of 56.2 per cent during 1979-80 and 1983-84, resulting in gross erosion of the financial base of the urban local bodies in India.

(3) One of the most disconcerting features of the state of finances was an *absolute* decline in the per capita incomes of urban local bodies. Figures in this regard are revealing. In 1979-80, the per capita ordinary incomes of the sampled municipalities was assessed at Rs. 128. In 1983-84, it declined to Rs. 125. It is evident that the increase in population as well as inflation made heavy in roads into the

revenue base of the urban local bodies during this period.

(4) Yet another indicator of the dismal state of municipal finances was the absence of any appreciable change in the overall structure of the municipal incomes during the reference period of the study. The relative positions of the various components of incomes were not only maintained but reinforced as far as the share of tax sources in the total was concerned. Also, the dependence of municipalities on State's grants and contributions continued to be almost as high (15.3 per cent in 1983-84) as it was in 1979-80 (16.1 per cent).

(5) As indicated earlier, worst-affected during 1979-80 and 1983-84 were the relatively smaller municipalities. The extent of the deterioration in the state of their finances can be visualised by the fact that even buoyant taxes like octroi, and also property taxes which are often used to measure growth, failed to make any impact on their incomes. Table 17 below is relevant in this regard.

TABLE 17 : Per Capita Incomes From Property and Octroi Taxes at Constant Prices

(Rs.)

Size Class	Property taxes		Octroi	
	1979-80	1983-84	1979-80	1983-84
+1 Million	35.2	56.2	49.1	55.1
100,000—1 Million	8.6	8.1	28.0	38.2
50,000—100,000	5.2	6.4	15.9	17.1
20,000—50,000	3.2	3.2	12.6	11.0
—20,000	2.3	2.5	14.6	11.0
TOTAL	23.5	35.2	38.4	44.6

(6) As against the lack of any appreciable change in the structure of incomes, the expenditure side of municipal finances experienced major shifts during the study period. For one thing, the expenditure on establishment increased by 104.2 per cent as against an overall increase of 56.2 per cent in the total expenditure of municipalities. Also, expenditure on establishment which was 11.45 per cent of the total in the base year of the study and ranked rather low in terms of expenditures on public health (23.9 per cent), public works (17.2 per cent), and public instruction (11.6 per cent), increased to 14.97 per cent in 1983-84 surpassing percentage expenditures on all components but one, that is, public health.

(7) The figures on the levels of municipal expenditure per capita present yet another evidence on the poor state of municipal finances in India. On an average, an amount of Rs. 121 per capita was spent on establishment and maintenance of services. In smaller municipalities, this amount ranged between a high of Rs. 66.6 for those which had populations of 50—100,000, Rs. 47.7 for those having populations of 20—

50,000, and Rs. 46.4 for those with populations of less than 20,000. What is important to note is that the smaller municipalities registered very marginal increases in the expenditure levels between 1979-80 and 1983-84. In this sense, smaller local bodies today present a dismal picture with their per capita incomes having declined, and their inability to step up in any appreciable manner the levels of their expenditure. One does not have to look for data outside of the municipal finances to explain the worn-out and depressed state of the services and infrastructure, that they presently offer.

57. Two positive features of the state of municipal finances need to be underlined and noted. Firstly, the study showed an appreciable increase in the non-tax sources of revenues between 1979-80 and 1983-84. In terms of share, revenues from non-tax sources which include receipts from the sale of services and from what have come to be known as "remunerative projects", constituted in 1983-84, 10.2 per cent of the total as compared to 7.2 per cent in 1979-80. Also, revenues from these sources increased by 54.9 per cent during a four year period, an impressive increase considering

the fact that the aggregate revenues increased by 9.7 per cent, and tax revenues by 15.4 per cent. Throughout the analysis, this is one development that indicates the increasing awareness on the part of municipalities to the "other sources of revenues" which they can mobilise to prop up their own finances.

58. A second feature of the state of municipal finances is that there were a large number of urban local bodies which achieved significantly higher rates of both in comes and expenditures during the reference period of the study, indicating that even within the rigid framework of resource-raising powers it was possible for them to achieve a high level of performance. Tables giving the aggregative as well as data of specific urban local bodies have been annexed. These show that 60 out of 210 municipalities moved into higher income brackets, while 80 out of 210 moved into higher expenditure brackets between the period 1979-80 and 1983-84. These also show very significantly that the top ten municipalities which achieved higher growth rates and enjoyed consistently higher incomes and expenditure levels were located in the relatively high-income States of Gujarat, Maharashtra and Himachal Pradesh. Uttar Pradesh, on the other hand, had the largest number of municipalities among the bottom ten.

59. Notwithstanding a few bright spots, one can not fail to take note of the overall depressing and deteriorating state of municipal finances in India. Almost every set of data presented in this study indicate that the urban local bodies are in a financial mess, and are fast moving towards financial bankruptcy. They have accumulated in recent years massive liabilities and debts on various accounts—a fact which has thus far remained very obscure and outside of any study on municipal finances. The Gujarat Municipal Finance Board recently estimated that the outstanding liabilities of the State's 58 corporations and municipalities stood at Rs. 188.2 million (1983-84), which formed 8.6 per cent of the total municipal revenues in that year. In the case of municipalities alone, that is, excluding the corporations, liabilities accounted for 20.29 per cent of the revenues. In many cases, these were as high as 60-70 per cent as may be seen from the following table.

TABLE 18 : Outstanding liabilities (Gujarat)

Class	Liabilities (Rs. million)	Per cent of Municipal incomes
Corporations	86.32	5.11
A—Class Municipalities	10.76	8.32
B—Class Municipalities	68.48	28.13
C—Class Municipalities	22.60	17.51
All Classes	18.82	8.59
Bhavnagar	23.84	40.43
Surendranagar	11.76	69.29
Jetpur	8.55	75.35
Wadhavan	1.26	50.52

60. Yet another evidence of the decline in the state of municipal finances is available from the reports of the Task forces on Housing and Urban Development⁹. According to the Task Forces, the municipal sector contributed in 1960-61, 8 per cent of the total resources generated by the public sector in India. In 1980-81, this share had shrunk to a mere 4.5 per cent. While these figures have not been updated, it appears unlikely that any appreciable change in the municipal sector's share of the public sector resources would have taken place, more so when the municipal resources have been showing at best a tardy rate of growth (2—2.2 per cent annually).

61. It is equally important to point out that it is only the share of corporations and municipalities in public sector resources which is in any way significant. The share of other, relatively smaller local bodies is small. According to the crude estimates, nearly 50 per cent of the total municipal sector resources are generated by corporations (urban local bodies having 1 million population), and another one-third by municipalities falling in the population range of 100,000—1 million. Only about 10 per cent of the municipal sector resources are generated by smaller local bodies even though they account for a little over 70 per cent of the total number of urban local bodies in the country. Crude estimates in this regard, contained in the following table, only help to further reinforce the fragility of the their revenue base.

TABLE 19 : Estimates of relative shares of different sizes of urban local bodies in municipal sector resources

Size Groups	Per cent to total	
	1979-80	1983-84
+1 million	47.9	50.5
100,000—1 million	29.7	31.0
50—100,000	10.4	9.0
20—50,000	8.6	6.4
<20,000	3.4	3.1
	100.0	100.0

62. Evidently, the question arises as to what should be done to pull the urban local bodies out of the existing financial mess. Is there anything possible? Is there something that the urban local bodies can do within the existing institutional framework to improve their financial viability? Or, have we reached a cul-de-sac? Such questions are, however, not new; in fact, these have engaged in the past the attention of a very large number of commissions and committees (see, partial list at Annex), who have both written about the poor state of the municipal finances as well as about ways in which the financial decline of municipalities could be arrested. What has, therefore, been done in this report is to identify and reinforce certain areas for action, and for further examination, without claiming that these are either new or that these have been tested for their feasibility.

9. Planning Commission, *Task Forces on Housing and Urban Development, II. Financing of Urban Development*, New Delhi, 1983.

63. It was stated earlier that property taxes and octroi levies constitute the bane of the revenue base of municipalities in India. Even though, as this study has shown, their per capita contributions declined during the reference period of the study, their primate positions in the resource hierarchy remain unaffected. It is obvious that no appreciable improvement in the resource base of the municipalities can be visualised by leaving these two sources of revenues out of consideration.

64. The key question is as to how reforms can be brought about in e.g., the structure of property taxes. Can anything be done to improve the collection rates of property taxes which today ranges between 30—50 per cent? Can anything be done to realistically assess the property values which stand grossly undervalued? A new lead emerges from this study, lowering of property tax rate being one of them. Experience in the country shows that higher tax rates lead to evasion, and other malpractices associated with evasion. It would seem relevant for the states to lower the tax rates, lay down "minimum" rates of taxes rather than "maximum" which are rarely used by the urban local bodies, and provide incentives for advance payment of property taxes. Indexing of property values to at least correspond with the inflation rate could be one of the ways in which property values could be reassessed without being susceptible to local pressures.

65. A lot has been written about octroi, both for and against its imposition. The decision to abolish it evidently rests on the ground that the benefits that the economy would derive by its abolition are higher than what the economy would derive by its retention. The question is: who in the economy will stand to benefit by them? Can the benefits be channelled to the municipalities? Can ways be found to do so? This is certainly one lead that needs further probing.

66. Yet another important lead falls within the domain of the non-tax sources of revenues. It was pointed out earlier in the report that the non-tax sources of revenues which include receipts from the sale of services and facilities have begun to assume importance in the local resource structure. During the reference period of the study, the revenues from non-tax sources in relation to total increased from 7.2 per cent to 10.2 per cent. In per capita terms too, these showed promise in comparison with other components of incomes. Notwithstanding the increasing importance of non-tax sources, the fact remains that very little is known today about either the cost structure of any service or facility or about the manner in which its selling price is determined. Studies conducted by NIUA show that virtually no estimates are available as to what it costs to produce, say, 100,000 ltrs of water, or provide "scavenging" services in the city. Costs are fragmented, and charged to various accounts. Likewise, the connections by way of

sale of a service are also made under various heads (water tax and charges being a typical example). In other words, no relationship seems to exist between the cost of a service and its price, with the result that the potentials of the non-tax sources remain untapped. It is extremely relevant that the prices of various services are so fixed as to at least recover the costs, both capital and recurring, in order to prop up the revenues of the urban local bodies?

67. Efficient management of the available financial resources would be an important element in any strategy for improving the municipal resource base. Several studies have referred to the mounting leakages and wastages of resources at municipal levels. A NIUA study on "Management of Urban Services" showed that almost 31—33 per cent of water either leak out from the system or remain unaccounted for. Almost the same percentage of solid wastes remain uncollected from the road sides and garbage depots. If these leakages and wastages are converted into money terms, the financial losses would run into extraordinarily high figures. Could something not be done to minimize these losses, again in order to improve the finances of the urban local bodies?

68. A lot has already been written about the imbalance between the obligatory responsibilities of the urban local bodies and their powers to efficiently exercise those responsibilities. Resource-raising and resource-sharing powers that they currently enjoy are grossly inadequate to do any justice to the responsibilities that they have at present. It has often been argued that there are certain taxes such as entertainment tax, motor vehicles tax, stamp duty etc. which are localised and should fall within the net of the urban local bodies. What is important, however, is to identify sources which would increase the overall "pie", rather than merely transfer a revenue source from the state to the local bodies. Such a move will tend to adversely affect the level of states revenues, and may, in turn, result in reduction in the levels of grants etc. It is, therefore, important that the entire question of intergovernmental financial relations that have bearing on municipal revenue be re-assessed, without any prejudice to any level of government.

69. Any reform of municipal finances has to take note of the fact that the demand for municipal services will grow exponentially in the years to come. Trends indicate that the number of people who will not be able to pay economic prices of the various services will also increase, at least until the turn of the century. Unless the municipalities can begin to take a fresh look at the existing resource-raising powers, and begin a systematic search for non-conventional sources of revenues, the chances that they will survive the increasing financial pressures seem bleak.



सत्यमेव जयते

ANNEX A
Population Estimates for Sampled Urban Centres (In '000')

Name	Census Population		Annual Compound Growth-Rate (%)	Population Estimates	
	1971	1981		1980	1984
METROPOLITAN					
Ahmedabad MTC	1,585.5	2,039.7	2.7	2,005.1	2,227.9
Bombay MTC	5,970.6	8,243.4	3.3	7,973.2	9,081.0
Calcutta MC	3,150.0	3,191.6	0.1	3,187.4	3,204.2
Delhi MC	3,706.6	4,884.2	2.8	4,747.6	5,305.7
Kanpur MTC	1,273.0	1,531.3	1.9	1,502.7	1,618.6
Madras MTC	2,469.4	3,276.6	2.9	3,182.6	3,566.8
Pune MTC	856.1	1,203.3	3.5	1,161.6	1,332.7
CLASS-I					
Aligarh M	252.3	319.2	2.4	311.6	342.5
Alleppey M	160.1	169.9	0.6	168.9	173.0
Alwar M	100.4	145.7	3.8	140.2	162.9
Baranagar M	136.8	170.3	2.2	166.5	181.9
Bharatpur M	69.9	105.2	4.2	100.8	118.9
Bharuch M	92.3	110.1	1.8	108.1	116.1
Bhavnagar M	226.0	307.1	3.1	297.5	336.7
Bulandshahar M	59.5	103.4	5.7	97.5	122.0
Chandernagore MC	75.2	101.9	3.1	98.8	111.6
Dehradun M	162.6	211.8	2.7	206.1	229.3
Firozabad M	134.9	202.8	4.2	194.4	229.2
Ghaziabad M	118.8	276.4	8.8	252.0	356.1
Gorakhpur M	230.9	289.2	2.3	282.6	309.4
Hapur M	73.2	103.4	3.5	99.8	114.7
Haridwar M	77.9	114.4	3.9	109.9	128.4
Hissar M	89.4	137.3	4.4	131.3	156.2
Howrah M	680.5	744.4	0.9	737.7	764.7
Indore M	543.4	829.3	4.3	793.5	941.4
Jagadhari M	35.1	160.4	16.4	134.1	253.0
Jamnagar MC	214.0	277.6	2.6	270.3	300.1
Jaunpur M	76.0	104.9	3.3	101.5	115.5
Junagarh M	95.9	118.6	2.1	116.1	126.4
Kharagpur M	62.0	150.4	9.3	136.5	196.2
Kolhapur M	259.1	340.6	2.8	331.2	369.7
Kota M	213.0	358.2	5.3	339.1	418.6
Meerut MC	271.0	417.2	4.4	398.8	474.9
Moradabad M	258.6	332.6	2.5	324.1	358.7
Muzaffar Nagar M	114.8	172.4	4.2	165.2	194.8
Nabadwip M	94.2	109.1	1.5	107.5	114.0

Population Estimates for Sampled Urban Centres (In '000)

Name	Census Population		Annual Compound Growth-Rate (%)	Population Estimates	
	1971	1981		1980	1984
CLASS-I					
Nadiad M	108.3	142.6	2.8	138.6	154.9
Nasik Road M	70.0	262.4	14.1	225.3	390.1
Panihati M	148.3	205.7	3.3	198.9	226.9
Porbander M	96.9	115.1	1.7	113.1	121.2
Rajkot MC	260.9	445.0	5.5	420.6	522.3
Rampur M	163.0	203.4	1.9	199.5	215.4
Rohtak M	124.8	166.7	2.9	161.8	181.8
Sambhal	68.9	108.3	4.6	103.3	124.0
Seramore M	102.0	127.3	2.2	124.4	136.0
Shajahan Pur M	135.5	185.6	3.2	179.7	204.0
Siliguri M	97.5	154.3	4.7	147.1	177.1
Solapur M. CRP	398.4	511.1	2.5	498.2	550.8
Surat MC	471.5	776.5	5.1	736.8	901.9
Thane M	167.0	309.8	6.4	290.1	372.9
Ujjain M	208.5	278.4	2.9	270.2	303.6
Varanasi MC	583.9	764.7	2.7	743.8	829.2
Yamuna Nagar M	72.6	109.3	4.2	104.7	123.6
CLASS-II					
Azamgarh M	41.0	66.4	4.9	63.1	76.7
Ballia M	47.1	61.3	2.7	59.7	66.3
Bela Pratapgarh M	27.9	50.1	6.0	47.1	59.7
Bhuj M	52.2	69.6	2.9	67.6	75.9
Bidar M	50.7	78.8	4.5	75.2	89.9
Bijnaur M	43.3	56.6	2.7	55.1	61.3
Budaun M	72.0	92.5	2.5	90.2	99.7
Cambay M	62.1	68.7	1.0	68.0	70.8
Champany M	58.6	76.1	2.6	74.1	82.3
Chandausi M	53.4	66.4	2.2	64.9	70.9
Darjeeling M	42.9	57.6	3.0	55.9	62.9
Dewas M	51.9	83.4	4.9	79.3	96.2
Dhoraji M	60.0	76.5	2.5	74.6	82.3
Dhrangadhra M	40.8	51.2	2.3	50.0	54.8
Dohad M	44.5	55.2	2.2	54.0	58.9
Etah M	33.5	55.3	5.1	52.5	64.3
Fateh Pur M	54.6	85.0	4.5	81.2	97.1
Gandhidham M	38.8	61.4	4.7	58.5	70.5
Garulia M	43.6	57.0	2.7	55.5	61.8

Population Estimates for Sampled Urban Centres (In '000)

Name	Census Population		Annual Compound Growth-Rate (%)	Population Estimates	
	1971	1981		1980	1984
CLASS-II					
Godhra M	66.4	85.7	2.6	83.5	92.5
Gonda M	53.2	70.7	2.9	68.7	77.0
Hardoi M	46.7	82.6	—	77.8	98.0
Hospet M	65.2	90.5	3.3	87.5	99.9
Jetpur M	41.9	61.8	4.0	59.4	69.4
Kalol M	50.3	69.9	3.3	67.6	77.2
Karad M	42.3	54.3	2.5	52.9	58.5
Kasganj M	46.5	61.3	2.8	59.6	66.6
Kashipur M	16.7	52.0	12.0	45.7	73.1
Lakhimpur Kheri M	43.8	60.1	3.2	58.2	66.1
Lalitpur M	34.5	56.4	5.0	53.6	65.4
Mahuva M	41.6	53.6	2.6	52.2	57.8
Mainpuri M	43.8	59.8	3.2	57.9	65.7
Mehsana M	51.7	72.8	3.5	70.3	80.7
Midnapur M	71.7	86.1	1.8	84.5	91.0
Modinagar M	43.5	77.2	5.9	72.6	91.7
Morvi M	61.2	73.3	1.8	72.0	71.4
Navabganj M	35.3	51.9	3.9	49.9	58.3
North Dum Dum	63.9	96.9	4.3	92.8	109.8
Patan M	64.6	79.1	2.0	77.5	84.1
Sardarnagar M	39.5	50.1	2.4	48.9	53.8
Shamli M	37.0	51.7	3.4	49.9	57.2
Surendranagar M	66.7	89.3	3.0	86.9	97.9
Trichur M	76.2	77.9	0.2	77.7	78.4
CLASS-III					
Aland M	21.6	26.4	2.0	25.9	28.0
Alipurduar M	36.8	45.3	2.1	44.3	48.2
Ankleshwar M	26.2	26.1	3.3	34.9	39.7
Aonla M	21.8	26.4	1.9	25.9	28.0
Atarauli M	21.1	27.3	2.6	26.6	29.5
Balrampur M	36.2	46.0	2.4	44.9	49.1
Baraut M	31.3	46.2	4.0	44.5	52.1
Barbil M	24.4	33.0	3.1	32.0	36.1
Bargarh M	22.9	35.4	4.5	33.8	40.3
Beesalpur M	19.6	28.4	3.8	27.3	31.7
Bharthana M	13.7	24.4	5.9	23.0	29.0
Bilimora M	31.4	43.7	3.4	42.2	48.3

Population Estimates for Sampled Urban Centres (In '000)

Name	Census Population		Annual Compound Growth Rate (%)	Population Estimates	
	1971	1981		1980	1984
CLASS-III					
Chandpur M	28.2	41.5	3.9	39.9	46.6
Charkhi Dadri M	13.8	27.3	7.1	25.4	33.5
Choudwar M	24.3	32.1	2.8	31.2	34.9
Contai M	26.9	35.7	2.9	34.7	38.9
Dhampur M	22.7	29.0	2.5	28.3	31.2
Dholka M	37.5	44.2	1.7	43.5	46.4
Gangohi M	24.3	32.7	3.0	31.7	35.7
Golagokaran Nath M	21.2	30.3	3.6	29.2	33.7
Harda M	28.5	37.6	2.8	36.4	40.9
Hasanpur M	22.7	29.8	3.0	28.9	32.6
Jahangirabad M	21.6	29.2	3.1	28.3	32.0
Kadi M	28.3	34.5	2.0	33.8	36.6
Kairana M	32.4	44.5	3.2	43.1	48.9
Kalka M	17.1	21.3	2.2	20.8	22.8
Kalpee M	21.3	29.1	3.2	28.2	32.0
Kandhala M	20.1	25.5	2.5	24.9	27.4
Keeratpur M	25.1	32.0	2.5	31.2	34.4
Kendrapada M	20.1	27.5	3.2	26.6	30.2
Khairabad M	17.4	22.7	2.7	22.1	24.6
Khardah M	32.3	45.2	3.4	43.7	50.0
Khatauli M	24.5	31.4	2.4	30.6	33.8
Kodungallur M	24.6	28.3	1.0	28.0	29.2
Kosikalan M	19.1	24.1	2.4	23.5	25.8
Laharpur M	20.2	27.1	3.0	26.3	29.6
Mahaba M	29.7	38.8	2.7	37.7	42.0
Mangalor M	19.7	25.7	2.7	25.0	27.8
Mangrol M.	27.8	36.9	2.9	35.8	40.2
Mao Ranipur M	25.7	33.7	2.7	32.8	36.6
Mawana M.	24.9	37.6	4.2	36.0	42.5
Murad Nagar M	14.0	26.0	6.4	24.3	31.3
Muvattupuzha M	22.1	25.3	1.4	25.0	26.3
Nahtaur M	20.3	27.6	3.1	26.7	30.3
Narvana M.	21.3	29.2	3.2	28.3	32.1
Palitana M	27.6	34.4	2.2	33.6	36.7
Panvel M	26.6	37.0	3.4	35.8	40.9
Parlakhemeudi M	26.9	32.3	1.8	31.7	34.1

Population Estimates for Sampled Urban Centres (In '000)

Name	Census Population		Annual Compound Growth-Rate (%)	Population Estimates	
	1971	1981		1980	1984
CLASS-III					
Pilkhua M	24.0	37.7	4.6	36.0	43.2
Puranpur M	14.5	22.6	4.5	21.6	25.8
Rajpipla M	25.8	29.2	1.2	28.8	30.3
Ramnagar M	17.5	24.5	3.4	23.7	27.1
Raniganj M	40.1	48.7	2.0	47.7	51.6
Rishikesh M	11.2	29.1	10.0	26.2	38.8
Sawaimadhopur M	21.1	28.1	2.9	27.3	30.6
Seohara M	22.8	30.1	2.8	29.3	32.7
Shahabad M	23.1	38.8	5.3	36.7	45.3
Shahabad M	33.4	42.6	2.5	41.6	45.8
Shikohabad M	31.4	47.0	4.1	45.1	53.0
Shorapur M	21.1	25.4	1.9	24.9	26.9
Sikandra Rao M	17.1	21.6	2.4	21.1	23.2
Sikandrabad M	32.0	43.1	3.0	41.8	47.1
Sironj M	22.4	28.7	2.5	28.0	30.9
Sultanpur M	32.3	48.7	4.2	46.7	55.1
Tilhar M	26.8	33.5	2.3	32.7	35.8
Ujhani M	22.1	29.4	2.9	28.5	32.0
Vrindavan M	29.5	36.8	2.2	36.0	39.3
CLASS IV					
Achhanera M	12.2	15.2	2.2	14.9	16.2
Aheraura M	11.3	14.3	2.4	14.0	15.3
Aliganj M	10.2	13.9	3.1	13.5	15.3
Anupshahar M	12.3	15.2	2.1	14.9	16.2
Bachharaon M	12.4	17.7	3.6	17.1	19.7
Barwasagar M	10.0	14.6	3.9	14.0	16.4
Bilari M	11.6	15.8	3.1	15.3	17.3
Chirgaon M	9.0	11.3	2.3	11.0	12.1
Chitguppa M	13.4	16.6	2.2	16.2	17.7
Dadri M	13.1	19.6	4.1	18.8	22.1
Dugadda M	1.7	2.1	2.1	2.1	2.2
Farrukh Nagar M	5.5	6.3	1.4	6.2	6.6
Fatehpur Sikri M	14.0	17.9	2.5	17.5	19.3
Gopiganj M	7.1	10.3	3.8	9.9	11.5
Jalalpur M	14.4	19.3	3.0	18.7	21.1
Kakrala M	14.5	19.3	2.9	18.7	21.0
Kotdwara M	11.5	19.4	5.4	18.4	22.7

Population Estimates for sampled urban Centres (In '000)

Name	Census population		Annual Compound Growth-Rate (%)	Population Estimates	
	1971	1981		1980	1984
CLASS-IV					
Kurseong M	16.4	18.0	0.9	17.8	18.5
Mandi M	15.7	18.7	1.8	18.4	19.7
Mantown M	22.1	30.9	3.4	29.8	34.2
Marahera M	11.5	12.1	0.5	12.0	12.3
Misritnemisharanya M	6.8	9.9	3.8	9.5	11.1
Mungra Badshahpur M	9.4	12.2	2.6	11.9	13.2
Naligarh M	3.7	5.6	4.2	5.4	6.3
Narendra Nagar M	2.4	3.5	3.8	3.4	3.9
Nilokheri M	9.8	11.6	1.7	11.4	12.2
Norangpur M	13.7	19.0	3.3	18.4	21.0
Paliakalan M	9.8	19.8	7.3	18.4	24.5
Pauri Garhwal M	8.9	13.4	4.2	12.8	15.2
Pihani M	13.5	16.3	1.9	16.0	17.2
Pundri M	9.1	11.8	2.6	11.5	12.8
Sadhaura M	9.0	10.1	1.2	10.0	10.5
Sandi M	11.6	14.9	2.5	14.5	16.1
Seonimalwa M	12.1	15.8	2.7	15.4	17.1
Shah Ganj M	11.5	15.0	2.7	14.6	16.2
Shamsabad M	9.9	14.9	4.2	14.3	16.8
Sirsa Ganj M	10.6	14.9	3.5	14.4	16.5
Solan M	10.1	13.1	2.6	12.8	14.2
Soron M	17.1	19.4	1.3	19.2	20.1
Srinagar M	5.6	9.2	5.1	8.7	10.7
Swar M	9.8	14.9	4.3	14.3	16.9
Tanakpur M	6.0	8.8	3.9	8.5	9.9
Tehari M	5.5	12.2	8.3	11.2	15.5
Thakurdwara M	11.1	16.5	4.0	15.8	18.6
Uklana Mandi M	6.0	7.0	1.6	6.9	7.3
Uttarkashi M	6.0	10.0	5.2	9.5	11.7
Vikas Nagar M	4.1	8.9	8.1	8.2	11.2

ANNEX B

*Estimated Resource Gap as per
Zakaria Committee expenditure norms
1979-80 and 1983-1984 (At 1979-80 Prices)*

Urban Centre	Resource Gap (In '000)	
	1979-80	1983-84
METROPOLITAN		
Ahmedabad MTC	—	48,841.9
Bombay MTC	—	—
Calcutta M C	304,052.7	166,184.4
Delhi M C	123,272.1	366,913.2
Kanpur MTC	162,804.6	199,083.9
Madras MTC	423,484.1	486,002.8
Pune MTC	17,062.4	27,328.9
CLASS-I		
Aligarh M	33,824.7	39,640.8
Alleppey M	20,164.5	22,440.2
Alwar M	15,825.3	19,040.3
Baranagar M	15,826.7	22,678.3
Bharatpur M	11,350.1	13,225.1
Bharuch M	3,777.8	3,469.0
Bhavnagar M	17,352.0	2,585.7
Bulandshahar M	11,405.2	13,101.5
Chandernagore MC	6,531.2	9,544.8
Dehradun M	18,228.6	23,743.6
Firozabad M	23,866.1	25,820.2
Ghaziabad M	25,664.9	33,879.2
Gorakhpur M	32,088.4	33,396.9
Hapur M	9,616.6	12,282.3
Haridwar M	5,213.2	14,314.2
Hissar M	12,982.3	12,772.5
Howrah M	—	64,501.3
Indore M	55,178.4	114,486.4
Jagadhari M	18,839.6	33,020.8
Jamnagar MC	21,611.4	7,586.7
Jaunpur M	11,498.2	10,519.1
Junagarh M	5,792.7	2,634.2
Kharagpur M	15,311.1	25,888.5
Kolhapur M	—	—
Kota M	28,452.0	38,996.7
Meerut MC	34,906.5	50,801.9
Moradabad M	37,133.2	42,761.5
Muzaffar Nagar M	16,328.1	19,763.1
Nabadwip M	13,077.5	14,777.5

B-2
Estimated Resource Gap as per
Zakaria Committee expenditure norms
1979-80 and 1983-84 (At 1979-80 Prices)

Urban Centre	Resource Gap (in '000)	
	1979-80	1983-84
CLASS-I		
Nadiad M	3,307.4	3,729.4
Nasik Road M	22,343.8	—
Panihati M	24,947.2	26,123.2
Porbander M	6,312.0	4,346.7
Rajkot MC	22,084.3	17,872.6
Rampur M	24,465.5	26,029.5
Rohtak M	17,070.2	17,144.6
Sambhal	13,305.6	15,995.9
Seramore M	10,572.8	5,813.1
Shajahanpur M	20,211.6	19,189.4
Siliguri M	15,619.6	20,945.4
Solapur M. CRP	25,326.8	18,916.3
Surat MC	19,172.8	28,254.2
Thane M	—	—
Ujjain M	19,920.3	29,552.5
Varanasi MC	79,263.1	106,306.0
Yamuna Nagar M	7,009.8	8,738.9
CLASS- II		
Azamgarh M	4,979.5	6,157.5
Balia M	4,346.9	5,620.6
Bela Pratapgarh M	3,492.7	4,345.5
Bhuj M	2,993.1	2,711.1
Bidar M	6,383.7	7,273.1
Bijnaur M	5,062.2	4,614.6
Budaun M	6,939.7	8,774.8
Cambay M	1,818.3	1,902.6
Champdany M	6,135.4	6,579.3
Chandausi M	5,440.4	6,387.6
Darjeeling M	2,825.1	4,079.0
Dewas M	6,157.5	5,050.1
Dhoraji M	4,535.5	965.3
Dhrangadhra M	3,575.9	3,596.6
Dohad M	—	1,221.3
Etah M	3,263.8	5,106.5
Fateh pur M	7,728.7	9,726.6
Gandhidham M	3,422.0	4,009.4
Garulia M	2,608.1	4,927.7

*Estimated Resource Gap as per
Zakaria Committee expenditure norms
1979-80 and 1983-84 (At 1979-80 Prices)*

Urban Centre	Resource Gap (In '000)	
	1979-80	1983-84
CLASS-II		
Godhra M	798.0	3,786.1
Gonda M	6,491.6	7,881.9
Hardoi M	8,255.8	7,046.4
Hospet M	565.0	9,711.0
Jetpur M	1,912.8	—
Kalol M	1,730.5	—
Karad M	—	—
Kasganj M	4,709.1	4,715.6
Kashipur M	2,626.9	6,383.8
Lakhimpur Kheri M	4,730.5	3,939.8
Lalitpur M	4,692.1	4,915.9
Mahuva M	1,465.3	963.8
Mainpuri M	5,140.9	6,360.3
Mehsana M	2,400.4	1,570.7
Midnapur M	5,803.2	9,248.4
Modinagar M	7,038.3	9,194.8
Morvi M	—	1,433.5
Navabganj M	5,772.0	6,117.6
North Dum Dum M	9,592.2	11,575.8
Patan M	3,516.8	—
Sardarnagar M	4,589.2	4,734.0
Shamli M	4,371.8	1,040.7
Surendranagar M	1,968.7	—
Trichur M	—	3,747.7
CLASS-III		
Aland M	1,295.5	2,464.5
Alipurduar M	3,923.3	4,168.0
Ankleshwar M	—	—
Aonla M	2,088.2	1,729.6
Atarauli M	2,105.9	2,204.5
Balrampur M	3,364.7	3,640.0
Baraut M	2,771.3	3,581.7
Barbil M	1,955.8	2,545.1
Bargarh M	1,694.2	1,619.1
Beesalpur M	1,584.0	1,654.1
Bharthana M	1,942.7	2,572.9
Bilimora M	—	—

*Estimated Resource Gap as per
Zakaria Committee expenditure norms
1979-80 and 1983-1984 (At 1979-80 Prices)*

Urban Centre	Resource Gap (In '000)	
	1979-80	1983-84
CLASS-III		
Chandpur M	3,060.6	3,198.8
Charkhi Dadri M	1,208.9	1,029.6
Choudwar M	1,650.7	1,055.8
Contai M	3,014.2	3,469.7
Dhampur M	1,744.1	1,898.1
Dholka M	2,809.0	2,938.8
Gangohi M	2,080.5	3,085.6
Golagokaran Nath M	2,576.2	1,691.6
Harda M	894.9	1,706.1
Hasanpur M	1,968.8	2,451.9
Jahangirabad M	1,974.8	2,378.4
Kadi M	1,904.6	2,337.7
Kairana M	3,438.0	2,844.9
Kalka M	1,040.5	1,561.0
Kalpee M	2,311.8	2,425.1
Kandhala M	2,143.8	2,163.8
Keeratpur M	2,826.8	2,674.0
Kendrapada M	1,544.8	1,402.3
Khairabad M	1,340.5	2,091.0
Khardah M	2,109.1	3,568.1
Khatauli M	2,108.0	1,827.5
Kodungallur M	1,674.6	2,238.0
Kosikalan M	171.0	1,220.8
Laharpur M	2,635.2	2,640.3
Mahaba M	3,527.1	3,252.1
Manglaur M	2,239.8	2,286.5
Mangrol M	2,440.9	2,634.7
Mao Ranipur M	2,365.8	3,340.5
Mawana M	2,600.8	3,136.8
Murad Nagar M	2,304.3	2,599.7
Muvattupuzha M	1,395.2	1,458.8
Nahtaur M	2,268.1	2,367.4
Narvana M	1,556.3	1,856.9
Palitana M	1,120.7	159.5
Panvel M	—	—
Parlakhemundi M	1,359.3	2,366.0

B-5

*Estimated Resource Gap as per
Zakaria Committee expenditure norms
1979-80 and 1983-1984 (At 1979-80 Prices)*

Urban Centre	Resource Gap (In '000)	
	1979-80	1983-84
CLASS-IV		
Pilkhua M	1,409.6	3,008.0
Puranpur M	1,578.2	1,400.4
Rajpipla M	—	—
Ramnagar M	947.8	2,198.0
Raniganj M	1,861.7	3,876.6
Rishikesh M	404.1	1,626.7
Sawaimadhopur M	2,251.3	1,688.2
Seohara M	2,603.0	2,944.4
Shahabad M	3,271.6	4,242.8
Shahabad M	3,616.9	3,527.3
Shikohabad M	2,530.0	3,921.1
Shorapur M	1,907.0	2,325.8
Sikandra Rao M	433.5	1,283.6
Sikandrabad M	2,966.3	2,587.9
Sironj M	1,048.8	2,199.5
Sultanpur M	2,548.5	3,802.5
Tilhar M	2,789.6	2,411.2
Ujhani M	969.7	1,807.0
Vrindavan M	2,281.6	1,838.2
CLASS-IV		
Achhanera M	943.2	1,087.4
Aheraura M	1,045.2	1,066.6
Aliganj M	986.1	1,078.4
Anupshahar M	1,094.4	696.9
Bachharaon M	1,325.5	1,627.9
Barwasagar M	792.4	1,135.8
Bilari M	768.3	964.1
Chirgaon M	797.7	581.0
Chitguppa M	1,107.6	1,428.7
Dadri M	255.9	1,013.7
Dugadda M	—	21.5
Farrukh Nagar M	334.6	327.2
Fatehpur Sikri M	155.3	973.0
Gopiganj M	626.6	476.7
Jalalpur M	1,454.6	923.6
Kakrala M	1,417.8	1,525.0
Kotdwara M	772.3	649.6

*Estimated Resource Gap as per
Zakaria Committee expenditure norms
1979-80 and 1983-1984 (At 1979-80 Prices)*

Urban Centre	Resource Gap (In '000)	
	1979-80	1983-84
CLASS-IV		
Kurseong M	—	560.4
Mandi M	336.4	948.2
Mantown M	2,972.6	2,330.1
Marahera M	786.6	817.2
Misritnemisharanya M	487.5	442.8
Mungra Badshahpur M	381.6	346.4
Nalagarh M	115.8	208.6
Narendra Nagar M	130.0	128.1
Nilokheri M	630.5	657.6
Norangpur M	787.3	1,011.5
Paliakalan M	1,498.2	1,256.0
Pauri Garhwal M	798.1	735.9
Pihani M	1,166.0	943.8
Pundri M	983.5	884.0
Sadhaura M	582.0	616.8
Sandi M	1,022.6	970.8
Seonimalwa M	851.7	906.4
Shah Ganj M	353.1	288.2
Shamsabad M	528.9	948.7
Sirsa Ganj M	267.7	792.0
Solan M
Soron M	882.3	1,499.4
Srinagar M	319.1	.
Swar M	436.4	768.7
Tanakpur M	60.1
Tehri M	383.5	742.0
Thakurdwara M	1,001.4	1,005.9
Uklana Mandi M	148.9	179.5
Uttarkashi M	445.3	256.7
Vikas Nagar M	370.0	606.3

ANNEX C

Analysis of shift in per capita income between 1979-80 and 1983-84

Income components	Shifted to lower strata (Declined)	Static shift	Shifted to higher strata (Increase)	Total No. of local bodies
Tax Income	45	135	30	210
Non-Tax Income	(21.42)	(64.28)	(14.30)	(100.00)
Ordinary Grants	13	173	24	210
Average Shift	(6.20)	(82.38)	(11.42)	(100.00)
	31	151	28	210
	(14.76)	(71.90)	(13.33)	(100.00)
	60	93	57	210
	(28.57)	(44.29)	(27.14)	(100.00)

ANNEX D

Analysis of shift in per capita expenditure between 1979-80 and 1983-84

Size Class	Shift to lower per capita range	Same per capita range	Shifted to higher per capita range	Total No. of local bodies
Metropolitan	—	4	3	7
Class I	(15.21)	(47.83)	(36.96)	(100.00)
Class II	(11.63)	(39.53)	(48.84)	(100.00)
Class III	(13.43)	(53.73)	(32.84)	(100.00)
Class IV	(17.02)	(46.81)	(36.17)	(100.00)
All	(13.81)	(48.09)	(38.10)	(100.00)

ANNEX E

A list of Commissions and committees set up to examine the state of Municipal Finances in India

The Royal Commission on Decentralisation	1906
Indian Taxation Enquiry Committee	1924
Local Finance Enquiry Committee	1950
Taxation Enquiry Commission	1953-54
Committee of Ministers on the Augmentation of financial Resources of Urban Local Bodies	1963
Rural Urban Relationship Committee	1966
The Municipal Finance Commission (Maharashtra)	1974
The Municipal Finance Commission	1976
The Municipal Finance Enquiry Committee, Government of Tamil Nadu	1980
Karnataka Taxation Review Committee, 1981, Part II, Report on Local Finances	1983

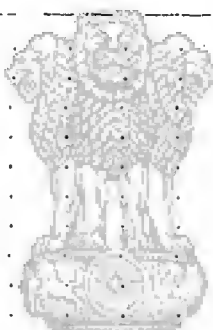
ANNEX F

Ten highest per Capita Income Municipal Bodies : 1979-80

Municipal Bodies	Total Income (Rs. In '000)	Per Capita Income
Bombay MTC	2,005,153.0	251.5
Solan M	2,594.0	203.4
Howrah M	149,374.0	202.5
Dohad M	10,568.0	195.7
Thane M	56,502.0	194.8
Ahmedabad MTC	390,119.0	194.6
Delhi MC	788,262.0	166.0
Trichur M	12,506.0	160.9
Ankleshwar M	5,501.4	157.5
Pune MTC	182,738.0	157.3

Ten Lowest per Capita Income Municipal Bodies : 1979-80

Municipal Bodies	Total Income (Rs. In '000)	Per Capita Income
Jalalpur M	278.0	15.3
Bachharaon M	261.0	15.3
Mahaba M	512.0	13.6
Murad Nagar M	300.0	12.3
Paliakalan M	209.0	11.4
Pundri M	85.0	7.4
Mantown M	221.0	7.4
Laharpur M	178.0	6.8
Jagadhari M	870.0	6.5
Navabganj M	311.0	6.2



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F-2

Ten Highest per Capita Income Municipal Bodies 1983-84

Municipal Bodies	Total Income (Rs. In '000)	Per Capita Income
Thane M	136,990.7	367.4
Bombay MTC	2,319,144.9	255.4
Nasik Road M	82,716.6	212.1
Surendranagar M	16,653.3	170.1
Ahmedabad MTC	378,914.5	170.1
Kolhapur M	59,458.3	160.8
Bilimora M	7,683.5	159.2
Karad M	9,196.8	157.1
Rajpipla M	4,718.2	155.7
Solan M	2,155.2	152.2

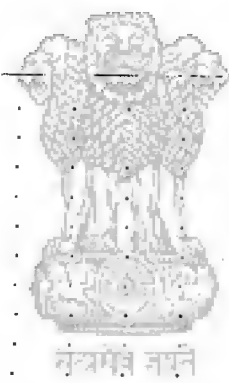
Ten Lowest per Capita Income Municipal Bodies : 1983-84

Municipal Bodies	Total Income (Rs. In '000)	Per Capita Income
Alleppey M	2,984.2	17.3
Navabganj M	990.3	17.0
Seohara M	556.2	17.0
North Dum Dum M	1,818.8	16.6
Jagadhari M	4,174.8	16.5
Mao Ranipur M	570.8	15.6
Kharagpur M	2,953.3	15.1
Shahabad M	607.7	13.4
Chitguppa M	217.6	12.3
Bachharaon M	203.6	10.3

F-3

Ten Highest per Capita Expenditure Municipal Bodies : 1979-80

Municipal Bodies	Total Expenditure (Rs. In '000)	Per Capita Expenditure
Vikas Nagar M	1,770.5	216.4
Dugadda M	444.0	216.0
Thane M	47,793.0	164.8
Ahmedabad MTC	325,602.0	162.4
Bilimora M	6,846.0	162.1
Surendranagar M	13,701.0	157.6
Kolhapur M	51,293.0	154.9
Surat MC	111,906.0	151.9
Panvel M	5,233.0	146.3
Solan M	1,815.3	142.3



Ten Lowest per Capita Expenditure Municipal Bodies : 1979-80

Municipal Bodies	Total Expenditure (Rs. In '000)	Per Capita Expenditure
Shahabad M	491.0	13.4
Farrukh Nagar M	74.0	11.9
Alipurduar M	525.0	11.8
Aland M	287.2	11.1
Bachharaon M	177.0	10.4
Chitguppa M	149.0	9.2
Panihati M	1,602.0	8.1
Pundri M	85.0	7.4
Laharpur M	159.0	6.0
Navabganj M	224.0	4.5

Ten Highest per Capita expenditure Municipal Bodies : 1983-84

Municipal Bodies	Total expenditure (Rs. In '000)	Per Capita Expenditure
Thane M	134,537.7	360.8
Ahmedabad MTC	541,585.1	243.1
Bombay MTC	1,952,312.0	215.0
Kolhapur M	64,595.6	174.7
Surat MC	152,293.4	168.9
Solan M	2,311.8	163.2
Patan M	13,602.0	161.8
Ankleshwar M	6,066.6	152.6
Dugadda M	330.0	147.5
Pune MTC	196,370.5	147.3

*Ten Lowest per Capita Expenditure Municipal Bodies : 1983-84*

Municipal Bodies	Total Expenditure (Rs. In '000)	Per Capita Expenditure
Alleppey M	3,438.9	19.9
Sambhal	2,246.8	18.1
Shajahan Pur M	3,625.5	17.8
Chitguppa M	291.8	16.5
Modinagar M	1,442.4	15.7
Jagadhari M	3,801.0	15.0
Laharpur M	431.5	14.6
Sardarnagar M	776.9	14.4
Navabganj M	745.9	12.8
Bachharaon M	187.2	9.5

*At Constant Prices.